

VISTA AT A GLANCE
FLEXIBILITY BY DESIGN™

## ABOUT US



## ABOUT VISTA

Vista is the largest CCTV supplier in the UK, dedicated to delivering the best of breed video products to market. Priding ourselves on the technical capabilities of our products, we firmly believe in combining simplicity with exceptional product performance.

Service remains at the core of why Vista has been so successful for so many years; the dedicated Vista team are in place to support customers at every step of the sales process, from specification and system design to pre and post-sales support.

With over 25 years experience in video, Vista has long tradition of providing an extensive range of analogue and IP video products to the CCTV markets both in the UK and across the world. Today, Vista products are sold into over 77 countries across 5 continents.

In this edition of 'Vista at a Glance' we are pleased to be able to launch a number of new exciting products into the Vista portfolio, including:

HD ANALOGUE PRODUCTS - The latest generation of Vista's analogue cameras and DVRs offer an increase of up to 25% in image quality without an increase on required storage compared to previous D1 products. Analogue products consist of cameras, DVRs and monitors.

IP PRODUCTS - Vista's wide range of VK2 IP cameras and Network Video Recorders offer up to broadcast quality 1080p HD video images. All products follow IT industry standards to ensure operability with Vista and other third party systems.

Complimenting the Vista VK2 range of cameras and NVRs, Vista provides a number of viewing software options including a Windows Client software, web browser viewing and mobile applications for both Apple and Android devices. Vista VK2 client software and mobile apps are available to download free of charge.

TRANSMISSION PRODUCTS - Vista's range of transmission product are used by alarm receiving centres across the world. Our latest models are BS8418 compliant offering complete peace of mind.

ACCESSORIES - To complement our mainline range of products, Vista provides a comprehensive range of accessories from pole mounts and cabling through to CCTV joysticks and monitors.

Of course, if you'd like to discuss any of your requirements with us in person, we'd love to hear from you.

## The Vista Team

## **Errors and Omissions**

The information in this price list has been checked for accuracy. No liability will be accepted by Norbain SD Ltd for any errors or omissions in this information.

# TIME TO BRING CCTV INTO TOP GEAR WITH THE VISTA VAN

Vista realise that when it comes to demonstrating CCTV equipment to customers, the hardest part is establishing the products' performance in-situ. For this reason they have invested heavily in a fleet of long wheel base Mercedes vans to take the demonstration right to their doorstep.

Come day or night, rain or shine, the Vista van is on hand to help demonstrate a vast selection of cameras, domes, DVRs, monitors, number plate recognition solutions and transmission equipment.

The vans each have their own dedicated driver who is fully qualified to perform in-depth demonstrations on the Vista equipment. As well as taking the installer and end user through the various security solutions onboard, they can also offer tips and advice on how to get the very best images for the end user's specific environment.

Other features include air-conditioning and seating for up to six people in the back, along with a fully stand-alone on-board generator. Packed full of the latest Vista products, the vans allow customers to actually see the products functioning, at the site in which they would be installed.





## OVERVIEW OF BENEFITS:

## VIEW FROM THE TOP

The van has a telescopic mast, extending to 5m. This allows footage to be captured on-site, encompassing the actual field of view the customer is interested in. This allows the customer to see exactly what issues may affect the image and how the cameras could be positioned to give the best possible coverage.

### DAY/NIGHT IMAGES

It's important for your customer to be able to see images in the context of their environment. Issues such as street lighting, or no ambient lighting at all, can affect the quality of images they receive. The vans can be positioned on-site and the cameras can be set-up to show what measures can be taken to ensure good quality images are captured.

## AN INTEGRATED SOLUTION

Because each of the vans carries entire solutions from the camera to the DVR to the software, your customer will be able to see how all the parts of a system work together.

## CAPTURING THE ACTION

VNPR (Vehicle Number Plate Recognition) cameras can be set up from the van to record vehicles entering and leaving the site. A full demonstration can be carried out including how the software interprets the data and analyses the results.



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0479000



## **BOX CAMERAS**

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|--------|-----|---------|-----|----|
| LU     | LUU | $IR\;M$ | IUI | w  |
|        |     |         |     |    |

VPC604CM

|                            |          | 12VDC/24VAC, 34x34x51mm  |
|----------------------------|----------|--|
| VPC5-700CME                | 0479140  | Colour Mono, 1/3", 700TVL, 0.15 lux, DD, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, motion           |
|                            |          | detection, privacy zones, RAL7035 (cool grey) case, 4W (550mA), 230VAC, 70x60x124.5m         |
| VPC5-704CME                | 0478850  | Colour Mono, 1/3", 700TVL, 0.15 lux, DD, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, motion           |
|                            |          | detection, privacy zones, RAL7035 (cool grey) case, 3.5W (300mA), 12VDC/24VAC,               |
|                            |          | 70x60x124.5mm  |
|                            |          |  |
| TRUE DAY NIGH              | т        |  |
|                            | 0.470450 | True Day Night, 1/3", 700TVL, 0.15/0.01 lux, DD, OSD, DWDR/ATR, DNR, AGC, BLC, PWI,          |
| VPC5-700DNE                | 0479150  | True day Night, 1/3 , 700 FVE, 0.15/0.0 Flux, DD, 05D, DWDR/ATR, DNR, AGC, BEC, PWI,         |
| VPC5-700DNE                | 0479150  | motion detection, privacy zones, RAL7035 (cool grey) case, 4W (550mA), 230VAC,               |
| VPC5-700DNE                | 0479150  | , 3 , 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1  |
|                            | 0479150  | motion detection, privacy zones, RAL7035 (cool grey) case, 4W (550mA), 230VAC,               |
| VPC5-700DNE<br>VPC5-704DNE |          | motion detection, privacy zones, RAL7035 (cool grey) case, 4W (550mA), 230VAC, 70x60x124.5mm |

Colour Mono, 1/3", 600TVL, 0.01 (0.0001 lux), sense-up, AI/DD/EI, OSD, DWDR, DNR, AGC, BLC, PWI, flickerless, motion detection, privacy zones, black case, 2.16W (180mA),

## TRUE DAY NIGHT DWDR WITH ANALYTICS

| 0474290 | True Day Night, 1/3", 700TVL, 0.1/0.01 lux (0.0001 lux slow shutter), sense-up, AI/DD/EI, OSD, |
|---------|--|
|         | DWDR/ATR, DNR, AGC, BLC, PWI, flickerless, privacy zones, video analytics, motion output,      |
|         | external DN input, RS485, UTP video, RAL7035 (cool grey) case, 4W (550mA), 230VAC,             |
|         | 70x60x124.5mm  |
| 0474280 | True Day Night, 1/3", 700TVL, 0.1/0.01 lux (0.0001 lux slow shutter), sense-up, AI/DD/EI, OSD, |
|         | DWDR/ATR, DNR, AGC, BLC, PWI, flickerless, privacy zones, video analytics, motion output,      |
|         | external DN input, RS485, UTP video, RAL7035 (cool grey) case, 3.5W (300mA),                   |
|         | 12VDC/24VAC, 70x60x124.5mm   |
|         |  |

## **DUMMY**

| VP5D 0445370 Dummy camera no lens, RAL7035 (cool grey) case, 70x60x124.5mm |
|--|
|--|

## **KEY FEATURES - VPC604CM**

## MAXIMUM SCENE DETAIL ACHIEVED

600TVL high resolution colour and monochrome images

## CLEAR IMAGES EVEN IN LOW LIGHT CONDITIONS

High sensitivity camera capable of 0.01Lux in colour mode and 0.00001Lux in monochrome mode (x256 sense-up) ensures continued operation in low-light conditions.

## COLOUR/MONOCHROME OPERATION

The colour burst signal is removed in low-light conditions to provide a cleaner monochrome image

## MAJORITY OF LIGHTING CONDITIONS CAN BE RESOLVED

OSD with advanced processing, including D-WDR, 3D-DNR and HSBLC (Peak White Inversion)

## PROTECTS SENSITIVE AND PERSONAL INFORMATION

8 user-selectable privacy zones ensures that personal and sensitive information remains protected

At 34x34x51mm the camera is suitable for covert installations and where space is at a minimum



VPC604CM (0479000)



## **BOX CAMERAS**

| COLOUR MONO  | RESOLUTION (TVL) | SENSITIVITY (LUX) | SLOW SHUTTER (LUX) | SENSE UP | AUTO IRIS | DIRECT DRIVE | ELECTRONIS IRIS | DWDR/ATR | BLC | PWI | MOTION DETECTION | PRIVACY ZONES | ANALYTICS | MOTION OUTPUT | EXTERNAL DN INPUT | RS485 | UTP VIDEO | HOUSING COLOUR      | VOLTAGE |
|--------------|------------------|-------------------|--------------------|----------|-----------|--------------|-----------------|----------|-----|-----|------------------|---------------|-----------|---------------|-------------------|-------|-----------|---------------------|---------|
| VPC604CM     | 600              | 0.01/0.0001       |                    | •        | •         | •            | •               | •        | •   | •   | •                | •             |           |               |                   |       |           | Black               | 12/24V  |
| VPC5-700CME  | 700              | 0.15              |                    |          |           | •            |                 | •        |     | •   | •                | •             |           |               |                   |       |           | RAL7035 (cool grey) | 230V    |
| VPC5-704CME  | 700              | 0.15              |                    |          |           | •            |                 | •        | •   | •   | •                | •             |           |               |                   |       |           | RAL7035 (cool grey) | 12/24V  |
| TRUE DAY NIG | нт               |                   |                    |          | •         |              |                 |          |     |     |                  | •             |           |               |                   |       |           |                     |         |
| VPC5-700DNE  | 700              | 0.15/0.01         |                    |          |           | •            |                 | •        | •   | •   | •                | •             |           |               |                   |       |           | RAL7035 (cool grey) | 230V    |
| VPC5-704DNE  | 700              | 0.15/0.01         |                    |          |           | •            |                 | •        | •   | •   | •                | •             |           |               |                   |       |           | RAL7035 (cool grey) | 12/24V  |
| VPC5-700DNS  | 700              | 0.1/0.01          | •                  | •        | •         | •            | •               | •        | •   | •   | •                | •             | •         | •             | •                 | •     | •         | RAL7035 (cool grey) | 230V    |
| VPC5-704DNS  | 700              | 0.1/0.01          | •                  | •        | •         | •            | •               | •        | •   | •   | •                | •             | •         | •             | •                 | •     | •         | RAL7035 (cool grey) | 12/24V  |





## **VPC5 SERIES**

## **KEY FEATURES - VPC5 SERIES**

Class leading 700TVL resolution colour and monochrome images deliver maximum scene detail

## COLOUR/MONOCHROME OPERATION (CME MODELS)

The colour signal is removed in low-light conditions to provide a cleaner monochrome image

## TRUE DAY/NIGHT OPERATION (DNE/DNS MODELS)

A switching IR cut filter allows the camera to be used with IR illumination ensuring quality images day or night

## LOW LIGHT PERFORMANCE (DNE/DNS MODELS)

With 0.1 lux operation in colour and 0.01 lux operation in monochrome it allows the camera to operate in very challenging low light applications

## WIDE DYNAMIC RANGE

This helps to provide balanced images in highly contrasting scenes of view (e.g. reception areas)

With 2D-DNR, ATR (Adaptive Tone Reproduction - which helps to balance the image in widely contrasting scenes of view), BLC and HLC (Peak White Inversion) it ensures that a majority of lighting conditions can be resolved

## PVA - VIDEO ANALYTICS (DNS MODELS)

Includes: Motion detection, Line crossing, Left luggage, Object tracking and counting

## PROTECTING SENSITIVE AND PERSONAL INFORMATION

4 user-selectable privacy zones ensure that personal and sensitive information remains protected

## MAINS AND LOW VOLTAGE MODELS AVAILABLE

This allows the camera range to be used in the majority of applications



## **BOX CAMERAS**

## **BRACKETS**

| VB1B | 0032650 | 5.5", wall/ceiling, auto lock, black     |
|------|---------|--|
| VB1W | 0032630 | 5.5", wall/ceiling, auto lock, white     |
| VCMB | 0033110 | 6.8", cable managed, RAL7035 (cool grey) |
| VB2B | 0032670 | 7.5", wall/ceiling, auto lock, black     |
| VB2W | 0032660 | 7.5", wall/ceiling, auto lock, white     |





## **BOX CAMERAS**

## LENSES - AUTO IRIS

| VA29V821P | 0442420 | 1/3", CS, 2.9-8.2mm, F1.0-360, AI, non-plugged, 30cm lead  |
|-----------|---------|--|
| VA7V7018  | 0072220 | 1/3", CS, 7.0-70.0mm, F1.8-360, AI, non-plugged, 30cm lead |
|           |         |  |

## **LENSES - DIRECT DRIVE**

| VDD28V111IRP     | 0095160 | 1/3", CS, 2.8-11.0mm, F1.4-360, DD, plugged, 10cm lead, IR Corrected         |
|------------------|---------|--|
| VDD28V1214PU     | 0346450 | 1/3", CS, 2.8-12.0mm, F1.4-360, DD, plugged, 10cm lead                       |
| VDD28V1213IRP-HR | 0471000 | 1/3", CS, 2.8-12.0mm, F1.3-360, DD, plugged, 30cm lead, IR Corrected, Hi-Res |
| VDD29V821P       | 0442400 | 1/3", CS, 2.9-8.2mm, F1.0-360, DD, plugged, 15cm lead                        |
| VDD3V81IRPe      | 0479180 | 1/3", CS, 3.0-8.0mm, F1.0, DD, plugged, 10cm lead, IR Corrected              |
| VDD31V812IRP-3MP | 0478870 | 1/2.7", CS, 3.1-8.0mm, F1.2-360, DD, plugged, 12cm lead, 3 MEGA-PIXEL        |
| VDD35V1010Pe     | 0256930 | 1/3", CS, 3.5-10.5mm, F1.0-360, DD, plugged, 10cm lead                       |
| VDD4V1212IRP     | 0253170 | 1/2", C, 4.0-12.0mm, F1.2-360, DD, plugged, 10cm lead, IR Corrected          |
| VDD5V5013Pe      | 0097070 | 1/3", CS, 5.0-50.0mm, F1.3-360, DD, plugged, 10cm lead                       |
| VDD5V5014PU      | 0315830 | 1/3", CS, 5.0-50.0mm, F1.4-360, DD, plugged, 10cm lead                       |
| VDD5V5014PU-300  | 0315840 | 1/3", CS, 5.0-50.0mm, F1.4-360, DD, plugged, 30cm lead                       |
| VDD10V4014IRP    | 0098690 | 1/2", C, 10.0-40.0mm, F1.4-360, DD, plugged, 10cm lead, IR Corrected         |
| VDD20V10016P     | 0253100 | 1/3", CS, 20.0-100.0mm, F1.6-360, DD, plugged, 10cm lead                     |
|                  |         |  |





## **BULLET CAMERAS**

| CO | LOL | JR I | MON | 10 | LED |
|----|-----|------|-----|----|-----|
|    |     |      |     |    |     |

| VBC300         | 0471610 | Colour Mono, 1/3", 420TVL, 0.1/0 lux, 4.6mm, El, AGC, 18 LEDs, up to 10m range,            |
|----------------|---------|--|
|                |         | black housing, 2.8W (230mA), 12VDC, 55x59.2x83mm, IP66, includes bracket                   |
| VBC301-600     | 0479010 | Colour Mono, 1/3", 600TVL, 0.1/0 lux, 3.6mm, El, DNR, AGC, 24 LEDs, up to 20m range,       |
|                |         | Smart IR, black housing, 4W (335mA), 12VDC, 50x65.5x139.5mm, IP67, includes bracket        |
|                |         |  |
| TRUE DAY NIGHT | LED     |  |
| VBC400-600     | 0479020 | True Day Night, 1/3", 600TVL, 0.1/0 lux, 2.8-12mm, DD, DNR, AGC, 30 LEDs, up to 25m range, |
|                |         | Smart IR, black housing, 4.5W (375mA), 12VDC, 218x88x131mm, IP67, includes bracket         |
| VBC28V12DN960H | 0479740 | True Day Night, 1/3", 960H (700TVL), 0.15/0 lux, 2.8-12mm, DD, OSD, DWDR/ATR, 2DNR,        |
| NEW W          |         | AGC, BLC, motion detection, privacy zones, 45 LEDs, up to 50m range, Smart IR, silver      |
|                |         | housing, 5.1W (420mA), 12VDC/24VAC, 98.4x177.5x263.5mm, IP66, includes bracket             |

True Day Night, 1/3", 960H (700TVL), 0.15/0 lux, 5-50mm, DD, OSD, DWDR/ATR,

2DNR, AGC, BLC, motion detection, privacy zones, 45 LEDs, up to 50m range, Smart IR, silver housing, 5.5W (460mA), 12VDC/24VAC, 98.4x177.5x263.5mm, IP66, includes bracket

| TRUE DAY | / NIGHT | WITH DUAL | LED |
|----------|---------|-----------|-----|

VBC5V50DN960H 0479730

| VBC502-960H | 0480160 | True Day Night, 1/3", 960H (700TVL), 0.15/0 lux, 2.8-12mm, DD, OSD, DWDR/ATR,           |
|-------------|---------|---|
| NEW the     |         | NR, AGC, BLC, HLC, motion detection, privacy zones, 2 x 35 LEDs, up to 50m range, Smart |
|             |         | IR, black housing, 10.6W (880mA) @ 12VDC, 7.2W (300mA) @ 24VAC, 175.5x106.4x263.4mm,    |
|             |         | IP66, includes bracket  |
| VBC503-960H | 0480170 | True Day Night, 1/3", 960H (700TVL), 0.25/0 lux, 5-50mm, DD, OSD, DWDR/ATR,             |
| NEW W       |         | NR, AGC, BLC, HLC, motion detection, privacy zones, 2 x 35 LEDs, up to 50m range, Smart |
|             |         | IR, black housing, 10.6W (880mA) @ 12VDC, 7.2W (300mA) @ 24VAC, 175.5x106.4x263.4mm,    |
|             |         | IP66, includes bracket  |

## **BRACKETS**

NEW W

| VBC-EPMA/B | 0496990 | Pole mount adapter for VBC50X-960H bullet cameras, requires jubilee clips (not included), |
|------------|---------|---|
|            |         | black   |



**VBC300** (0471610)



**VBC301-600** (0479010)



VBC400-600 (0479020)



## **BULLET CAMERAS**



| COLOUR MONOLED               | RESOLUTION TVL | SENSITIVITY (LUX) | LENS (mm) | DIRECT DRIVE | ELECTRONIS IRIS | DWDR/ATR | BLC | PWI | MOTION DETECTION | PRIVACY ZONES | NO OF IR LED's | IR DISTANCE (m) | SMART IR | HOUSING COLOUR | VOLTAGE | IP RATING |
|------------------------------|----------------|-------------------|-----------|--------------|-----------------|----------|-----|-----|------------------|---------------|----------------|-----------------|----------|----------------|---------|-----------|
| VBC300                       | 420            | 0.1/0             | 4.6       |              | •               |          |     |     |                  |               | 18             | 10              |          | Black          | 12V     | IP66      |
| VBC301-600                   | 600            | 0.1/0             | 3.6       |              | •               |          |     |     |                  |               | 24             | 20              |          | Black          | 12V     | IP67      |
| TRUE DAY NIGHT LED           |                |                   |           |              |                 |          |     |     |                  |               |                |                 |          |                |         |           |
| VBC400-600                   | 600            | 0.1/0             | 2.8-12    | •            |                 |          |     |     |                  |               | 30             | 25              | •        | Black          | 12V     | IP67      |
| VBC28V12DN960H               | 960H (700TVL)  | 0.15/0            | 2.8-12    | •            |                 | •        | •   | •   | •                | •             | 45             | 50              | •        | Silver         | 12/24V  | IP66      |
| VBC5V50DN960H                | 960H (700TVL)  | 0.15/0            | 5-50      | •            |                 | •        | •   | •   | •                | •             | 45             | 50              | •        | Silver         | 12/24V  | IP66      |
| TRUE DAY NIGHT WITH DUAL LED |                |                   |           |              |                 |          |     |     |                  |               |                |                 |          |                |         |           |
| VBC502-960H                  | 960H (700TVL)  | 0.15/0            | 2.8-12    | •            |                 | •        | •   | •   | •                | •             | 2x35           | 50              | •        | Black          | 12/24V  | IP66      |
| VBC503-960H                  | 960H (700TVL)  | 0.25/0            | 5-50      | •            |                 | •        | •   | •   | •                | •             | 2x35           | 50              | •        | Black          | 12/24V  | IP66      |





**VBC-DN960H Series** 



## **BULLET CAMERAS**

## **KEY FEATURES - VBCDN960H**

### HIGH RESOLUTION 960H IMAGING

Provides class leading 700TVL resolution colour and monochrome images to deliver maximum scene detail

A switching IR cut filter allows the camera to be used with IR illumination ensuring quality images day or night

### LONG RANGE IR ILLUMINATION

Inbuilt LEDs provide covert illumination of up to 50m

With 2DNR, ATR (Adaptive Tone Reproduction - which helps to balance the image in widely contrasting scenes of view), BLC and Peak White Inversion, it ensures that a majority of lighting conditions can be resolved

### PROTECTING SENSITIVE AND PERSONAL INFORMATION

8 user-selectable privacy zones ensure that personal and sensitive information remains protected

### CABLE MANAGED BRACKET & IP RATED

The fully cable managed bracket is perfect for wall, ceiling or soffit mounting and the IP66 rating ensures it is suitable for both internal and external environments

## **DUAL VOLTAGE OPERATION**

The 12/24V power supply provides greater flexibility in areas of use

## KEY FEATURES - VBC50X-960H

### HIGH RESOLUTION 960H IMAGING

Provides class leading 700TVL resolution colour and monochrome images to deliver maximum scene detail.

### BS8418:2010 COMPLIANT

The dual external IR pods make the camera suitable for use in BS8418:2010 compliant CCTV systems

### DUAL POD IR ILLUMINATION

Twin adjustable outboard IR pods equipped with 35x850nm IR LEDs deliver maximum night-time performance, for extended ranges >50m, whilst keeping attracted/nesting insects away from the camera lens for clearer images

### ADVANCED PROCESSING

With 2DNR, ATR (Adaptive Tone Reproduction - which helps to balance the image in widely contrasting scenes of view), BLC and Peak White Inversion, it ensures that a majority of lighting conditions can be resolved

### PROTECTING SENSITIVE AND PERSONAL INFORMATION

8 user-selectable privacy zones ensure that personal and sensitive information remains protected

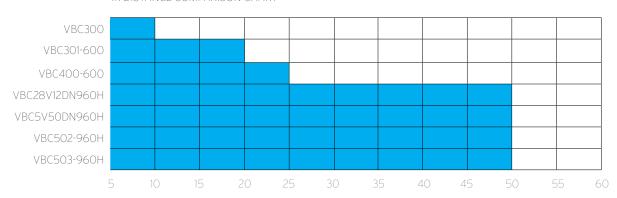
## CABLE MANAGED BRACKET & IP RATED

The fully cable managed bracket is perfect for wall, ceiling or soffit mounting and the IP66 rating ensures it is suitable for both internal and external environments

## **DUAL VOLTAGE OPERATION**

The 12/24V power supply provides greater flexibility in areas of use

## IR DISTANCE COMPARISON CHART





## **BULLET CAMERAS - VBC502/503-960H FEATURES CHART**





## **INTEGRATED ZOOM CAMERA**

| V7M22INT600    | 0478720 | True Day Night, 1/4", 600TVL, 0.5/0.05 lux (0.001 lux slow shutter), sense-up, x22        |
|----------------|---------|---|
| VZIVIZZIINTOOO | 04/0/20 |   |
|                |         | 3.9-85.8mm optical & x16 digital zoom lens, OSD, DWDR, DNR, AGC, BLC, flickerless, motion |
|                |         | detection, privacy zones, motion output, external DN input, RS485, RAL7035 (cool grey)    |
|                |         | case, 4.5W (380mA), 12VDC, 51x51x90mm   |
| EXTERNAL       |         |   |
| VZM22EXT600    | 0478730 | True Day Night, 1/4", 600TVL, 0.5/0.05 lux (0.001 lux slow shutter), sense-up, x22        |
|                |         | 3.9-85.8mm optical & x16 digital zoom lens, OSD, DWDR, DNR, AGC, BLC, flickerless, motion |
|                |         | detection, privacy zones, motion output, external DN input, RS485, RAL7035 (cool grey     |
|                |         | housing, clear bubble, 9W (750mA), 12VDC/24VAC, 100x82x208mm, IP66                        |
| ACCESSORIES &  | SPARES  |   |
| VZM22/REM      | 0350110 | VZM22/VVRD22/VVRD650 local wired engineer set up tool                                     |

Note - An integrated zoom camera is also available in the popular VVRD vandal resistant dome style housing. Please refer to Page 22 for more information.





## **VANDAL RESISTANT CAMERA** (ideal for mobile applications)

## **VANDAL RESISTANT**

VLS-CAM600IR 0474270 Colour Mono, 1/3", 600TVL, 0.63/0 lux, 3.6mm, DD, 3-Axis, DWDR, DNR, AGC, BLC, flickerless, PWI, motion detection, privacy zones, motion output, 11 LEDs, up to 10m range, RAL7035 (cool grey) housing, clear bubble, 3W (250mA), 12VDC, 94x130x63.3mm, IP66

### **KEY FEATURES - VZM22**

600TVL colour and monochrome resolution deliver maximum scene detail

The high quality optical zoom provides a focal length of 3.9~85.8mm, with a further 16x digital zoom available if required

### TDN OPERATION WITH EXTERNAL INPUT FOR SWITCHING

The cameras have the option to switch automatically or manually from day time operation (colour) to night time operation (monochrome), fully integrating with Vista's VIRSY2 range of lighting units, ensuring no hunting occurs on change from day to night time operation

## SIMPLE OSD SET UP

The easy to use OSD provides access to features such as BLC, AGC, sense-up (x128), 2D-DNR, 3D-DNR and WDR ensure that the best possible images are achieved regardless of the lighting conditions

### ALARM INPUT

A preset zoom and focus setting can be triggered via an external device suchas a PIR detector or via the units internal video motion detection, causing automatic zoom onto a pre-determined location

## MOTION & FACE DETECTION WITH OUTPUT

Integrated motion detection and face detection analytics provides an on screen display and activates the 3.3vTTL output allowing either switching or increased recording rates to control equipment

## PRIVACY ZONES

The inclusion of 16 privacy zones with either colour block or mosaic mask, allow concealment of sensitive areas, such as chip and pin machines

## **REMOTE RS485 CONTROL**

The cameras can be controlled remotely via RS485 protocols allowing for integration with all leading control products

## WEATHERPROOF CASING

The external camera is rated to IP66 providing a high degree of weather proofing allowing for installation in virtually any location, with a fully cable managed bracket for a secure installation



VLS-CAM600IR (0474270)

## KEY FEATURES - VLS-CAM600IR

### HIGH-RESOLUTION IMAGING

600TVL resolution colour and monochrome images deliver maximum scene detail

## SOFTWARE DAY/NIGHT OPERATION

Provides clear monochrome images in low light conditions which are fully IR sensitive allowing the camera to operate at Olux

## INTEGRAL 3.6MM LENS

High-quality wide-angle lens provides 63° field of view

## SIMPLE OSD SET UP

The easy to use OSD provides access to features such as DWDR,2D-DNR, AGC, BLC, HLC (Peak White Inversion), ensuring that the best possible images are achieved regardless of the lighting conditions. Park line feature allows lines to be overlaid onto the image to assist with vehicle movements

## INTERNAL OR EXTERNAL OPERATION

The IP66 rating and low profile vandal resistant housing permits flexibility of installation

## 3-AXIS GIMBLE

Allows a wide range of mounting positions to obtain the ideal scene of view



## **FIXED DOMES - INTERNAL - VFD RANGE**

| VFD28V12CM76OH-BCB            | 0497760   | Colour Mono, 1/3", 760H (600TVL), 0.2 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,        |
|-------------------------------|-----------|--|
| NEW                           |           | DWDR, DNR, AGC, BLC, PWI, motion detection, privacy zones, black housing, clear            |
|                               |           | bubble, black liner, 1.3W, (110mA), 12VDC, 101.2x80.5mm                                    |
| VFD28V12CM760H-BSB            | 0497770   | Colour Mono, 1/3", 760H (600TVL), 0.2 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,        |
| NEW                           |           | DWDR, DNR, AGC, BLC, PWI, motion detection, privacy zones, black housing, smoked           |
|                               |           | bubble, black liner, 1.3W (110mA), 12VDC, 101.2x80.5mm                                     |
| VFD28V12CM760H-WCW            | 0497780   | Colour Mono, 1/3", 760H (600TVL), 0.2 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,        |
| NEW                           |           | DWDR, DNR, AGC, BLC, PWI, motion detection, privacy zones, white housing, clear            |
|                               |           | bubble, white liner, 1.3W (110mA), 12VDC, 101.2x80.5mm                                     |
| COLOUR MONO 960H (            | 700TVL)   |  |
| VFD28V12CM960H-BCB            | 0497790   | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,       |
| NEW W                         |           | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, black          |
|                               |           | housing, clear bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm                      |
| VFD28V12CM960H-BSB            | 0497800   | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,       |
| NEW HD                        |           | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, black          |
|                               |           | housing, smoked bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm                     |
| VFD28V12CM960H-WCHRB          | 0497810   | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,       |
| NEW HD                        |           | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, white          |
|                               |           | housing, chrome bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm                     |
| VFD28V12CM960H-WCW            | 0497820   | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,       |
| NEW #P                        |           | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, white          |
|                               |           | housing, clear bubble, white liner, 1.5W (125mA), 12VDC, 101.2x80.5mm                      |
| VFD28V12CM960H-WSB            | 0497830   | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,       |
| NEW HD                        |           | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, white          |
|                               |           | housing, smoked bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm                     |
| VFD28V12CM960H-WSW            | 0498060   | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR, |
| NEW W                         |           | ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, white housing,      |
|                               |           | smoked bubble, white liner, 1.5W (125mA), 12VDC, 101.2x80.5mm                              |
| COLOUR MONO 960H (            | 700TVL\\  | with LITP video  |
| VFD28V12CM960HU-BCB           | 0497840   | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,       |
| NEW #                         | 0497040   | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, UTP video,     |
| 11 L 11 mg                    |           |  |
| \/ED30\/13CM040HILBCD         | 0.407050  | black housing, clear bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm                |
| VFD28V12CM960HU-BSB NEW ##    | 0497850   | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,       |
| IN L W HAS                    |           | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, UTP video,     |
| VED 20 V/12 CM O COLUL I M CM | 0.4070.60 | black housing, smoked bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm               |
| VFD28V12CM960HU-WCW           | 0497860   | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,       |
| 14-11 000                     |           | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, UTP video,     |
| VED20V42CM0C0UU WCB           | 0.407070  | white housing, clear bubble, white liner, 1.5W (125mA), 12VDC, 101.2x80.5mm                |
| VFD28V12CM960HU-WSB           | 0497870   | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,       |
| NEW !!!                       |           | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, UTP video,     |



white housing, smoked bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm



## **FIXED DOMES - INTERNAL - VFD RANGE**



| COLOUR MONO          | RESOLUTION (TVL) | SENSITIVITY (LUX) | LENS (mm) | 3-AXIS | SERVICE JACK | DWDR/ATR | BLC | PWI | MOTION DETECTION | PRIVACY ZONES | IR OPTIMISER | UTP VIDEO | HOUSING COLOUR | BUBBLE COLOUR | LINER COLOUR | VOLTAGE |
|----------------------|------------------|-------------------|-----------|--------|--------------|----------|-----|-----|------------------|---------------|--------------|-----------|----------------|---------------|--------------|---------|
| VFD28V12CM76OH-BCB   | 600 (760H)       | 0.2               | 2.8-12    | •      | •            | •        | •   | •   | •                | •             |              |           | Black          | Clear         | Black        | 12V     |
| VFD28V12CM76OH-BSB   | 600 (760H)       | 0.2               | 2.8-12    | •      | •            | •        | •   | •   | •                | •             |              |           | Black          | Smoked        | Black        | 12V     |
| VFD28V12CM760H-WCW   | 600 (760H)       | 0.2               | 2.8-12    | •      | •            | •        | •   | •   | •                | •             |              |           | White          | Clear         | White        | 12V     |
| VFD28V12CM96OH-BCB   | 700 (960H)       | 0.25              | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            |           | Black          | Clear         | Black        | 12V     |
| VFD28V12CM960H-BSB   | 700 (960H)       | 0.25              | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            |           | Black          | Smoked        | Black        | 12V     |
| VFD28V12CM96OH-WCHRB | 700 (960H)       | 0.25              | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            |           | White          | Chrome        | Black        | 12V     |
| VFD28V12CM960H-WCW   | 700 (960H)       | 0.25              | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            |           | White          | Clear         | White        | 12V     |
| VFD28V12CM960H-WSB   | 700 (960H)       | 0.25              | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            |           | White          | Smoked        | Black        | 12V     |
| VFD28V12CM960H-WSW   | 700 (960H)       | 0.25              | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            |           | White          | Smoked        | White        | 12V     |
| VFD28V12CM960HU-BCB  | 700 (960H)       | 0.25              | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            | •         | Black          | Clear         | Black        | 12V     |
| VFD28V12CM960HU-BSB  | 700 (960H)       | 0.25              | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            | •         | Black          | Smoked        | Black        | 12V     |
| VFD28V12CM960HU-WCW  | 700 (960H)       | 0.25              | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            | •         | White          | Clear         | White        | 12V     |
| VFD28V12CM960HU-WSB  | 700 (960H)       | 0.25              | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            | •         | White          | Smoked        | Black        | 12V     |
| TRUE DAY NIGHT       |                  |                   |           |        |              |          |     |     |                  |               |              |           |                |               |              |         |
| VFD28V12DN96OH-BCB   | 700 (960H)       | 0.25/0.02         | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            |           | Black          | Clear         | Black        | 12V     |
| VFD28V12DN960H-WCW   | 700 (960H)       | 0.25/0.02         | 2.8-12    | •      | •            | •        | •   | •   | •                | •             | •            |           | White          | Clear         | White        | 12V     |





WHITE VFD DOME WITH CLEAR BUBBLE AND WHITE INNER LINER

BLACK VFD DOME WITH CLEAR BUBBLE AND BLACK INNER LINER



## FIXED DOMES - INTERNAL - VFD RANGE

## **KEY FEATURES - VFD-760H**

### HIGH RESOLUTION IMAGING

760H technology provides 600TV resolution colour and monochrome images to deliver excellent scene detail

### SIMPLE OSD SET UP

The easy to use OSD provides access to features such as DWDR, 2D-DNR, AGC, BLC, HBLC (Peak White Inversion), ensure that the best possible images are achieved regardless of the lighting

### PRIVACY ENSURED

8 user-selectable privacy zones ensure that personal and sensitive information remains protected

### COLOUR/MONOCHROME OPERATION

The colour signal is removed in low-light conditions to provide a clean monochrome image

### 3-AXIS GIMBLE

Allows the choice of ceiling or wall mounting

### OPTICALLY CORRECT BUBBLE

Optically correct lower bubble ensures high quality images, whilst inner liner provides discrete surveillance

## **KEY FEATURES - VFD-960H**

## HIGH RESOLUTION 960H IMAGING

Provides class leading 700TVL resolution colour and monochrome images to deliver maximum scene detail

With 2DNR, ATR (Adaptive Tone Reproduction - which helps to balance the image in widely contrasting scenes of view), BLC and Peak White Inversion, it ensures that a majority of lighting conditions can be resolved

## PROTECTING SENSITIVE AND PERSONAL INFORMATION

8 user-selectable privacy zones ensure that personal and sensitive information remains protected

## COLOUR/MONO & TRUE DAY/NIGHT MODELS

In CM models, the colour signal is removed in low-light conditions to provide a cleaner monochrome images. DN models have a switching IR cut filter allowing the camera to be used with IR illumination ensuring quality images day or night

## UTP VIDEO OPTION (HU MODELS)

Option for a balanced video output via NVT compatible twisted pair allows the camera to be used in structured cabled systems

## OPTICALLY CORRECT BUBBLE

Optically correct lower bubble ensures high quality images, whilst inner liner provides discrete surveillance

A choice of black and white body, smoked, clear and chrome bubbles, and common aesthetics across the range ensures a model is available for any aesthetic or specification requirement



VFDS-IWMB/B (0444940)



VFDS-IWMB/W (0444930)



VFDS-IPMB/W (0155090)



## **FIXED DOMES - INTERNAL - VFD RANGE**



## TRUE DAY NIGHT 960H (700TVL)

| VFD28V12DN960H-BCB | 0497880 | True Day Night, 1/3", 960H (700TVL), 0.25/0.02 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, |
|--------------------|---------|--|
| NEW HD             |         | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, black            |
|                    |         | housing, clear bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm                        |
| VFD28V12DN960H-WCW | 0497890 | True Day Night, 1/3", 960H (700TVL), 0.25/0.02 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, |
| NEW HD             |         | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, white            |
|                    |         | housing, clear bubble, white liner, 1.5W (125mA), 12VDC, 101.2x80.5mm                        |
|                    |         |  |
| DUMMY              |         |  |

| VFD-BSB-D   | 0498330 | Dummy VFD dome, black housing, smoked bubble, black liner, 101.2x80.5mm |
|-------------|---------|---|
| VFD-WCW-D   | 0498350 | Dummy VFD dome, white housing, clear bubble, white liner, 101.2x80.5mm  |
| VFD-WSB-D   | 0498360 | Dummy VFD dome, white housing, smoked bubble, black liner, 101.2x80.5mm |
| VFD-WCHRB-D | 0498340 | Dummy VFD dome, white housing, chrome bubble, black liner, 101.2x80.5mm |

## **BRACKETS**

| DIVACILLIS  |         |   |
|-------------|---------|---|
| VFDS-IWMB/W | 0444930 | Wall mount bracket for VFD, white   |
| VFDS-IWMB/B | 0444940 | Wall mount bracket for VFD, black   |
| VFDS-IPMB/W | 0155090 | Pendant mount bracket for VFD, 1.5m, white                                      |
| VDM-IPMCA   | 0276270 | Pole mount ceiling adaptor, RAL7035 (cool grey)                                 |
| VDM-IPMGA   | 0291100 | Pole mount girder adaptor, RAL7035 (cool grey)                                  |
| VDM-2MP     | 0276240 | 2m pole can be cut to size, RAL7035 (cool grey)                                 |
| VDM-C       | 0276250 | Coupler to join 2 x VDM-2MP together  |
| VFDS-IPMA   | 0300860 | Pole mount adaptor for VFD, requires VDM-2MP and either VDM-IPMCA or VDM-IPMGA, |
|             |         | RAL7035 (cool grey)   |

## **ACCESSORIES & SPARES**

| VFD/VVRD service lead | 0498370 | VFD/VFDA/VVRD service lead                        |
|-----------------------|---------|---|
| VFD-BC-B              | 0499020 | Spare clear bubble for VFD, black trim, no liner  |
| VFD-BS-B              | 0499030 | Spare smoked bubble for VFD, black trim, no liner |
| VFD-WC-B              | 0499040 | Spare clear bubble for VFD, white trim, no liner  |
| VFD-WS-B              | 0499050 | Spare smoked bubble for VFD, white trim, no liner |
| VFD-WCHR-B            | 0499060 | Spare chrome bubble for VFD, white trim, no liner |





## FIXED DOMES - INTERNAL - VFDA RANGE

| COLOI | ID M | $\alpha$ NI $\alpha$ $\alpha$ | AU /7  | COTVIN |
|-------|------|-------------------------------|--------|--------|
| COLO  |      | ספ טאוט                       | ODG(I) | OOTVL) |

| VFDA28V12CM960H24-BSB | 0498100 | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, |
|-----------------------|---------|--|
| NEW W                 |         | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, black    |
|                       |         | housing, smoked bubble, black liner, 2W (170mA) @ 12VDC, 3W (125mA) @ 24VAC,         |
|                       |         | 128x91mm   |
| VFDA28V12CM960H24-WCW | 0498110 | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, |
| NEW to                |         | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, white    |
|                       |         | housing, clear bubble, white liner, 2W (170mA) @ 12VDC, 3W (125mA) @ 24VAC,          |
|                       |         | 128x91mm   |
| VFDA28V12CM960H24-WCB | 0498650 | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, |
| NEW HP                |         | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, white    |
|                       |         | housing, clear bubble, black liner, 2W (170mA) @ 12VDC, 3W (125mA) @ 24VAC,          |
|                       |         | 128x91mm   |
|                       |         |  |

### COLOUR MONO 960H (700TVL) with UTP video

| VFDA28V12CM960HU24-BSB | 0498120 | Colour Mono, 1/3", 960H (700TVL) 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD,  |
|------------------------|---------|--|
| NEW W                  |         | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, UTP      |
|                        |         | video, black housing, smoked bubble, black liner, 2W (170mA) @ 12VDC, 3W (125mA)     |
|                        |         | @ 24VAC, 128x91mm  |
| VFDA28V12CM960HU24-WCW | 0498130 | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, |
| NEW HD                 |         | DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, UTP      |
|                        |         | video, white housing, clear bubble, white liner, 2W (170mA) @ 12VDC, 3W (125mA) @    |
|                        |         | 24VAC, 128x91mm  |

## TRUE DAY NIGHT 690E (570TVL) PIXIM WDR

|                      |         | clear bubble, white liner, 3W (250mA), 12VDC/24VAC, 128x91mm                              |
|----------------------|---------|---|
| NEW                  |         | OSD, WDR, DNR, AGC, BLC, motion detection, privacy zones, white housing,                  |
| VFDA28V12WDR690E-WCW | 0497910 | True Day Night, 1/3", Pixim, 690E (570TVL), 0.01 lux, 2.8-12mm, DD, 3-Axis, service jack, |
|                      |         | clear bubble, black liner, 3W (250mA), 12VDC/24VAC, 128x91mm                              |
| NEW                  |         | OSD, WDR, DNR, AGC, BLC, motion detection, privacy zones, black housing,                  |
| VFDA28V12WDR690E-BCB | 0497900 | True Day Night, 1/3", Pixim, 690E (570TVL), 0.01 lux, 2.8-12mm, DD, 3-Axis, service jack, |

## KEY FEATURES - VFDA-960H

## HIGH RESOLUTION 960H IMAGING

Provides class leading 700TVL resolution colour and monochrome images to deliver maximum scene detail

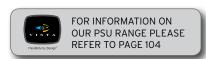
### ADVANCED PROCESSING

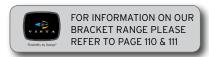
With 2DNR, ATR (Adaptive Tone Reproduction - which helps to balance the image in widely contrasting scenes of view), BLC and Peak White Inversion, it ensures that a majority of lighting conditions can be resolved

8 user-selectable privacy zones ensure that personal and sensitive information remains protected

## COLOUR/MONOCHROME OPERATION

The colour signal is removed in low-light conditions to provide a cleaner monochrome image





## UTP VIDEO OPTION (HU MODELS)

Option for a balanced video output via NVT compatible twisted pair allows the camera to be used in structured cabled systems

## OPTICALLY CORRECT BUBBLE

Optically correct lower bubble ensures high quality images, whilst inner liner provides discrete surveillance

## **DUAL VOLTAGE OPERATION**

The 12/24V power supply provides greater flexibility in areas of use



## **FIXED DOMES - INTERNAL - VFDA RANGE**



| COLOUR MONO              | RESOLUTION (TVL) | SENSITIVITY (LUX) | LENS (mm) | 3-AXIS | SERVICE JACK | WDR | DWDR/ATR | BLC | PWI | MOTION DETECTION | PRIVACY ZONES | IR OPTIMISER | UTP VIDEO | HOUSING COLOUR | BUBBLE COLOUR | LINER COLOUR | VOLTAGE |
|--------------------------|------------------|-------------------|-----------|--------|--------------|-----|----------|-----|-----|------------------|---------------|--------------|-----------|----------------|---------------|--------------|---------|
| VFDA28V12CM960H24-BSB    | 960H (700TVL)    | 0.25              | 2.8-12    | •      | •            |     | •        | •   | •   | •                | •             | •            |           | Black          | Smoked        | Black        | 12/24V  |
| VFDA28V12CM960H24-WCW    | 960H (700TVL)    | 0.25              | 2.8-12    | •      | •            |     | •        | •   | •   | •                | •             | •            |           | White          | Clear         | White        | 12/24V  |
| VFDA28V12CM960H24-WCB    | 960H (700TVL)    | 0.25              | 2.8-12    | •      | •            |     | •        | •   | •   | •                | •             | •            |           | White          | Clear         | Black        | 12/24V  |
| VFDA28V12CM960HU24-BSB   | 960H (700TVL)    | 0.25              | 2.8-12    | •      | •            |     | •        | •   | •   | •                | •             | •            | •         | Black          | Smoked        | Black        | 12/24V  |
| VFDA28V12CM960HU24-WCW   | 960H (700TVL)    | 0.25              | 2.8-12    | •      | •            |     | •        | •   | •   | •                | •             | •            | •         | White          | Clear         | White        | 12/24V  |
| TRUE DAY NIGHT PIXIM WDR |                  |                   |           |        |              |     |          |     |     |                  |               |              |           |                |               |              |         |
| VFDA28V12WDR690E-BCB     | 690E (570TVL)    | 0.01              | 2.8-12    | •      | •            | •   |          | •   |     | •                | •             |              |           | Black          | Clear         | Black        | 12/24V  |
| VFDA28V12WDR690E-WCW     | 690E (570TVL)    | 0.01              | 2.8-12    | •      | •            | •   |          | •   |     | •                | •             |              |           | White          | Clear         | White        | 12/24V  |

## **DUMMY**

| VFDA-BSB-D | 0499070 | Dummy VFDA dome, black housing, smoked bubble, black liner, 128x91mm  |
|------------|---------|---|
| VFDA-WCW-D | 0499080 | Dummy VFDA dome, white housing, clear bubble, white liner, 128x91mm   |
|            |         |   |
| BRACKETS   |         |   |
| VDM-IPMCA  | 0276270 | Pole mount ceiling adaptor, RAL7035 (cool grey)                       |
| VDM-IPMGA  | 0291100 | Pole mount girder adaptor, RAL7035 (cool grey)                        |
| VDM-2MP    | 0276240 | 2m pole can be cut to size, RAL7035 (cool grey)                       |
| VDM-C      | 0276250 | Coupler to join 2 x VDM-2MP together                                  |
| VFDA-IPMA  | 0499140 | Pole mount adaptor for VFDA, requires VDM-2MP and either VDM-IPMCA or |
|            |         | VDM-IPMGA, RAL7035 (cool grey)  |

## **ACCESSORIES & SPARES**

| VFD/VVRD service lead | 0498370 | VFD/VFDA/VVRD service lead                         |  |  |  |  |  |
|-----------------------|---------|--|--|--|--|--|--|
| VFDA-BS-B             | 0499090 | Spare smoked bubble for VFDA, black trim, no liner |  |  |  |  |  |
| VFDA-WC-B             | 0499100 | Spare clear bubble for VFDA, white trim, no liner  |  |  |  |  |  |



WHITE VFDA DOME WITH CLEAR BUBBLE AND BLACK INNER LINER



**BLACK VFDA DOME WITH CLEAR BUBBLE** AND BLACK INNER LINER



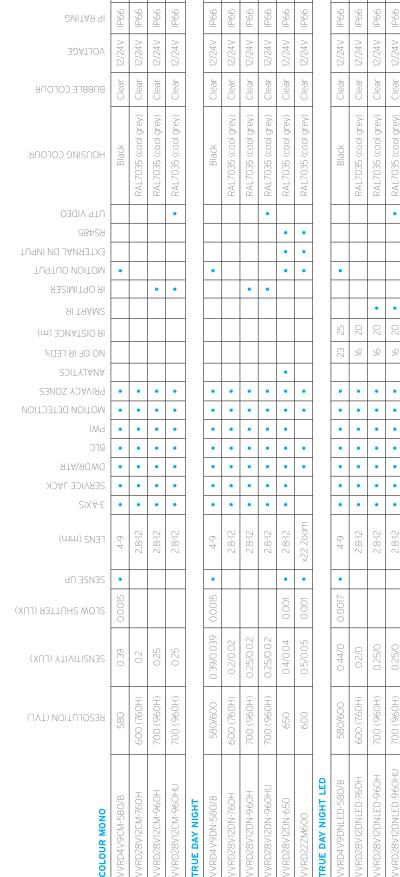
## FIXED DOMES - VANDAL RESISTANT - VVRD RANGE

| COLOUR MONO                       | 0.406630 | Calanda Alanda 1/2// 500TV// 0.20 land (0.0015 landa alanda 1/4) a sanara 1/2// 500TV// 0.20 landa (0.0015 landa alanda 1/4) a sanara 1/2// 500TV// 0.20 landa (0.0015 landa alanda 1/4) a sanara 1/2// 500TV// 0.20 landa (0.0015 landa alanda 1/4) a sanara 1/2// 500TV// 0.20 landa (0.0015 landa 1/4) |
|-----------------------------------|----------|--|
| VVRD4V9CM-580/B                   | 0496620  | Colour Mono, 1/3", 580TVL, 0.39 lux (0.0015 lux slow shutter), sense-up, 4-9mm, DD, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, PWI, motion detection, privacy zones, motion output, black housing, clear bubble, 2.5W (208mA), 12/VIC (2014)   |
| VVRD28V12CM-760H<br>NEW           | 0497920  | 12VDC/24VAC, 144x94mm, IP66 (IK10)  Colour Mono, 1/3", 760H (600TVL), 0.2 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, PWI, privacy zones, motion detection, RAL7035 (cool grey), housing, clear bubble, 2W (170mA) @ 12VDC, 3W (125mA) @ 24VAC, 144x94.5mm, IP66 (IK10)  |
| VVRD28V12CM-960H<br>NEW ∰         | 0497950  | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, privacy zones, motion detection, IR optimser, RAL7035 (cool grey) housing, clear bubble, 2W (170mA) @ 12VDC, 3W (125mA) @ 24VAC, 144x94.5mm, IP66 (IK10)  |
| VVRD28V12CM-960HU<br>NEW 啞        | 0497980  | Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, privacy zones, motion detection, IR optimser, UTP video, RAL7035 (cool grey) housing, clear bubble, 2W (170mA) @ 12VDC, 3W (125mA) @ 24VAC, 144x94.5mm, IP66 (IK10)   |
| TRUE DAY NIGHT                    |          |  |
| VVRD4V9DN-580/B                   | 0496660  | True Day Night, 1/3", 580/600TVL, 0.39/0.039 lux (0.0015 lux slow shutter), sense-up, 4-9mm, DD, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, PWI, motion detection, privacy zones, motion output, black housing, clear bubble, 2.5W (208mA), 12VDC/24VAC, 144x94mm, IP66 (IK10)   |
| VVRD28V12DN-760H<br>NEW           | 0497930  | True Day Night, 1/3", 760H (600TVL), 0.2/0.02 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, PWI, privacy zones, motion detection, RAL7035 (cool grey) housing, clear bubble, 2W (170mA)@ 12VDC, 3W (125mA) @ 24VAC, 144x94.5mm, IP66 (IK10)  |
| VVRD28V12DN-960H<br>NEW 12DN-960H | 0497960  | True Day Night, 1/3", 960H (700TVL), 0.25/0.02 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, privacy zones, motion detection, IR optimser, RAL7035 (cool grey) housing, clear bubble, 2W (170mA)@ 12VDC, 3W (125mA@ 24VAC, 144x94.5mm, IP66 (IK10)   |
| VVRD28V12DN-960HU<br>NEW          | 0497990  | True Day Night, 1/3", 960H (700TVL), 0.25/0.02 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, privacy zones, motion detection, IR optimser, UTP video, RAL7035 (cool grey) housing, clear bubble, 2W (170mA)@ 12VDC, 3W (125mA) @ 24VAC, 144x94.5mm, IP66 (IK10)  |
| TRUE DAY NIGHT LED                |          |  |
| VVRD4V9DNLED-580/B                | 0496690  | True Day Night, 1/3", 580/600TVL, 0.44/0 lux (0.0017 lux slow shutter), sense-up, 4-9mm, DD, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, PWI, motion detection, privacy zones, motion output, 23 LEDs, up to 25m range, black housing, clear bubble, 2.5W (208mA), 12VDC/24VAC, 144x94mm, IP66 (IK10)   |
| VVRD28V12DNLED-760H<br>NEW        | 0497940  | True Day Night, 1/3", 760H (600TVL), 0.2/0.02 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, PWI, privacy zones, motion detection, 16 LEDs, up to 20m range, RAL7035 (cool grey) housing, clear bubble, 2W (170mA)@ 12VDC, 3W (125mA) @ 24VAC, 144x94.5mm, IP66 (IK10)  |
| VVRD28V12DNLED-960H<br>NEW 12D    | 0497970  | True Day Night, 1/3", 960H (700TVL), 0.25/0.02 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, privacy zones, motion detection, 16 LEDs, up to 20m range, Smart IR, RAL7035 (cool grey) housing, clear bubble, 2W (170mA)@ 12VDC, 3W (125mA) @ 24VAC, 144x94.5mm, IP66 (IK10)  |
| VVRD28V12DNLED-960HU<br>NEW       | 0498000  | True Day Night, 1/3", 960H (700TVL), 0.25/0.02 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, privacy zones, motion detection, 16 LEDs, up to 20m range, Smart IR, UTP video, RAL7035 (cool grey) housing, clear bubble, 2W (170mA)@ 12VDC, 3W (125mA) @ 24VAC, 144x94.5mm, IP66 (IK10)   |





| NANDAL RESI | K10    | K10    | X<br>0 | X10    | IK10   | K10    | K10    | K10    | K10    | K10    | X10    | K10    | IK10   | IK10   | HD   |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| DNITAЯ 91   | 1P66   | IP66   | 1P66   | IP66   | 960Н |
| VOLTAGE     | 12/24V |      |
|             | _      | _      | _      | 7      | 7.     |        | _      | 75     | 7      | 7      | _      | 7      | 7      | ~      |      |











## FIXED DOMES - VANDAL RESISTANT - VVRD RANGE

### TRUE DAY NIGHT LED 650TVL DWDR WITH ANALYTICS

VVRD28V12DN-650 0478290 True Day Night, 1/3", 650TVL, 0.4/0.04 lux (0.001 lux slow shutter), sense-up, 2.8-12mm,

> DD, 3-Axis, service jack, OSD, DWDR/ATR, DNR, AGC, BLC, flickerless, PWI, privacy zones, video analytics, motion output, external DN input, RS485, RAL7035 (cool grey) housing,

clear bubble, 3.5W (300mA), 12VDC/24VAC, 146x114mm, IP66 (IK10)

## TRUE DAY NIGHT DWDR WITH INTEGRATED ZOOM LENS

VVRD22ZM600 0478740 True Day Night, 1/4", 600TVL, 0.5/0.05 lux (0.001 lux slow shutter), sense-up, x22

3.9-85.8mm optical & x16 digital zoom lens, OSD, DWDR/ATR, DNR, AGC, BLC,

flickerless, motion detection, privacy zones, motion output, external DN input, RS485, RAL7035 (cool grey) housing, clear bubble, 5W (420mA), 12VDC/24VAC, 152x120mm,

IP66 (IK10)

## KEY FEATURES - VVRD-CM960H

Provides class leading 700TVL resolution colour and monochrome images to deliver maximum scene detail

The colour signal is removed in low-light conditions to provide a cleaner monochrome image

### ADVANCED PROCESSING

With 2DNR, ATR (Adaptive Tone Reproduction - which helps to balance the image in widely contrasting scenes of view), BLC and Peak White Inversion, it ensures that a majority of lighting conditions can be resolved

## PROTECTING SENSITIVE AND PERSONAL INFORMATION

8 user-selectable privacy zones ensure that personal and sensitive information remains protected

## UTP VIDEO OPTION (HU MODELS)

Option for a balanced video output via NVT compatible twisted pair allows the camera to be used in structured cabled systems

### VANDAL RESISTANT

The rugged aluminium casing (built to IK10) and IP66 rating make this camera suitable for external, internal and hostile applications

**VVRD-CM/DN DOME** 

### **KEY FEATURES - VVRD-DNLED960H**

### HIGH RESOLUTION 960H IMAGING

Provides class leading 700TVL resolution colour and monochrome images to deliver maximum scene detail

### 16 X 850NM INTERNAL LEDS WITH TRUE DAY/NIGHT OPERATION

The switching IR cut filter allows the camera to be used with the integral IR LEDs, providing discrete illumination (O lux) up to a distance of 20m (dependent on reflective scene content)

With 2DNR, ATR (Adaptive Tone Reproduction - which helps to balance the image in widely contrasting scenes of view), BLC and Peak White Inversion, it ensures that a majority of lighting conditions can be resolved

### PROTECTING SENSITIVE AND PERSONAL INFORMATION

8 user-selectable privacy zones ensure that personal and sensitive information remains protected

## UTP VIDEO OPTION (HU MODELS)

Option for a balanced video output via NVT compatible twisted pair allows the camera to be used in structured cabled systems

## VANDAL RESISTANT

The rugged aluminium casing (built to IK10) and IP66 rating make this camera suitable for external, internal and hostile applications

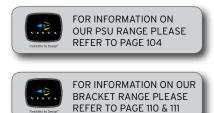


**VVRD-DNLED DOME** 



## FIXED DOMES - VANDAL RESISTANT - VVRD RANGE

| DUMMY                                  |          |   |
|--|----------|---|
| VVRD-D                                 | 0499110  | Dummy dome, RAL7035 (cool grey) housing, smoked bubble, black liner, 144x94mm   |
| DD 4 GVETS                             |          |   |
| BRACKETS                               | 0.400300 | Calling appear for WVDD VDL COOpen VDL 7 WD CM, W/2 VDD, W/2 COODT7 C Felipse2  |
| VVRD/VPL7-SPACER                       | 0498380  | Ceiling spacer for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2,   |
| VVRD-EWMB1                             | 0479030  | RAL7035 (cool grey), 3/4 NPT side conduit hole, 146x38mm  Wall bracket (low profile) for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ |
| A A KD-E MINIDI                        | 04/9030  | & Eclipse2, RAL7035 (cool grey)   |
| VRD-FWMB                               | 0498930  | Wall mount bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &   |
| VILD EVVIVID                           | 0470730  | Eclipse2, RAL7035 (cool grev)   |
| VRD-EWMB/B                             | 0499150  | Wall mount bracket for VVRD-580. black  |
| VPL-EWMB/PSU                           | 0442910  | Wall mount bracket with built-in 24VAC PSU for VVRD, VPL7-WP-SM & VK2-VRD,  |
| ,, , , , , , , , , , , , , , , , , , , | 023.0    | RAL7035 (cool grey)   |
| VDM-ECMA                               | 0457230  | Corner mount adaptor for wall mount brackets, RAL7035 (cool grey)   |
| VDM-EPMAg                              | 0457240  | Pole mount adaptor for wall mount brackets, requires jubilee clips (not included),  |
|  |          | RAL7035 (cool grey)   |
| VRD-EPMB                               | 0498940  | Pendant mount bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &  |
|  |          | Eclipse2, RAL7035 (cool grey)   |
| VDM-IPMCA                              | 0276270  | Pole mount ceiling adaptor, RAL7035 (cool grey)   |
| VDM-IPMGA                              | 0291100  | Pole mount girder adaptor, RAL7035 (cool grey)  |
| VDM-2MP                                | 0276240  | 2m pole can be cut to size, RAL7035 (cool grey)   |
| VDM-C                                  | 0276250  | Coupler to join 2 x VDM-2MP together  |
| VPL-IPMA                               | 0291180  | Pole mount adaptor for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &   |
|  |          | Eclipse2, requires VDM-2MP and either VDM-IPMCA or VDM-IPMGA, RAL7035   |
|  |          | (cool grey)   |
| VRD-TM                                 | 0498950  | Tower mount swan neck bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-  |
|  |          | 600PTZ & Eclipse2, RAL7035 (cool grey)  |
| ACCESSORIES & SPA                      | RFS      |   |
| VFD/VVRD service lead                  | 0498370  | VFD/VFDA/VVRD service lead  |
| VZM22/REM                              | 0350110  | VZM22/VVRD22/VVRD650 local wired engineer set up tool   |
| VVRD-C-B                               | 0499120  | Spare clear bubble for VVRD760/960, RAL7035 (cool grey) trim  |
| VVRD-S-B                               | 0499130  | Spare smoked bubble for VVRD760/960, RAL7035 (cool grey) trim   |
| VPL-B-CLR                              | 0478590  | Spare clear bubble for VVRD650, VPL7-WP-SM, VPL7-WP-PM, VK2-VRD & VK2-600PTZ  |
|  |          | RAL7035 (cool grey) trim  |
| VPL-B-SMO                              | 0479590  | Spare smoked bubble for VVRD650, VPL7-WP-SM, VPL7-WP-PM, VK2-VRD & VK2  |
|  |          | 600PTZ, RAL7035 (cool grey) trim  |





## **POWERDOME LITE**

| SURFACE/WALL/PEN | IDANT MOUNT   |  |
|------------------|---------------|--|
| VPL600eco        | 0479630       | True Day Night, 1/4", 600TVL, 0.5/0.05 lux, 22x optical zoom, RS485 telemetry,     |
|                  |               | RAL7035 (cool grey) dome, clear bubble, 8W (750mA), 12VDC, 154x141mm, requires     |
|                  |               | PSU & bracket (internal only)  |
| VPL7-WP-SM       | 0474550       | True Day Night, 1/4", 700TVL, 0.1/0.01 lux, 22x optical zoom, RS485 or coax        |
|                  |               | telemetry, RAL7035 (cool grey) dome, clear bubble, 12W (1A/500mA), 12VDC/24VAC,    |
|                  |               | 154x141mm, IP66 (IK10), requires PSU & bracket                                     |
| WALL/PENDANT MO  | UNT - INCLUDE | S HEATER & SUNSHIELD   |
| VPL7-WP-PM       | 0475010       | True Day Night, 1/4", 700TVL, 0.1/0.01 lux, 22x optical zoom, RS485/232 or coax    |
|                  |               | telemetry, RAL7035 (cool grey) dome, clear bubble, dome 12W (1A/500mA) @           |
|                  |               | 12VDC/24VAC, 24VAC heater 45W (1.8A), 186x205mm, IP66 (IK10), requires PSU &       |
|                  |               | bracket  |
| BRACKETS         |               |  |
| VVRD/VPL7-SPACER | 0498380       | Ceiling spacer for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2,    |
|                  |               | RAL7035 (cool grey), 3/4 NPT side conduit hole, 146x38mm                           |
| VPL-SM-FM        | 0497090       | False ceiling mount kit for VPL7-WP-SM, RAL7035 (cool grey)                        |
| VVRD-EWMB1       | 0479030       | Wall bracket (low profile) for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ    |
|                  |               | & Eclipse2, RAL7035 (cool grey)  |
| VRD-EWMB         | 0498930       | Wall mount bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &          |
|                  |               | Eclipse2, RAL7035 (cool grey)  |
| VPL-EWMBe        | 0498960       | Wall mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, RAL7035 (cool grey)       |
| VPL-EWMB/PSU     | 0442910       | Wall mount bracket with built-in 24VAC PSU for VVRD, VPL7-WP-SM & VK2-VRD,         |
|                  |               | RAL7035 (cool grey)  |
| VDM-ECMA         | 0457230       | Corner mount adaptor for wall mount brackets, RAL7035 (cool grey)                  |
| VDM-EPMAg        | 0457240       | Pole mount adaptor for wall mount brackets, requires jubilee clips (not included), |
|                  |               | RAL7035 (cool grey)  |
| VRD-EPMB         | 0498940       | Pendant mount bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &       |
|                  |               | Eclipse2, RAL7035 (cool grey)  |
| VPP-IPMB250      | 0472170       | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 250mm, RAL7035         |
|                  |               | (cool grey)  |
| VPP-IPMB500      | 0472180       | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 500mm, RAL7035         |
|                  |               | (cool grey)  |
| VPP-IPMB1000     | 0472190       | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 1000mm, RAL7035        |
|                  |               | (cool grey)  |
| VPP-IPMB2000     | 0472200       | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 2000mm,                |
|                  |               | RAL7035 (cool grey)  |
| VDM-IPMCA        | 0276270       | Pole mount ceiling adaptor, RAL7035 (cool grey)                                    |
| VDM-IPMGA        | 0291100       | Pole mount girder adaptor, RAL7035 (cool grey)                                     |
| VDM-2MP          | 0276240       | 2m pole can be cut to size, RAL7035 (cool grey)                                    |
| VDM-C            | 0276250       | Coupler to join 2 x VDM-2MP together   |
| VPL-IPMA         | 0291180       | Pole mount adaptor for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &          |
|                  |               | Eclipse2, requires VDM-2MP and either VDM-IPMCA or VDM-IPMGA, RAL7035              |
|                  |               | (cool grey)  |
| VPP-IPMA         | 0472160       | Pole mount adaptor for VPL7-WP-PM, VPP & VK2-1080PTZHSG, requires VDM-2MP and      |
|                  |               | either VDM-IPMCA or VDM-IPMGA, RAL7035 (cool grey)                                 |



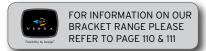
## POWERDOME LITE

| VRD-TM   | 0498950 | Tower mount swan neck bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2- |
|----------|---------|--|
|          |         | 600PTZ & Eclipse2, RAL7035 (cool grey)                                       |
|          |         |  |
| VPP-TM   | 0470440 | Tower mount swan neck bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, RAL7035  |
|          |         | (cool grey)  |
| VPP-ESMB | 0452090 | Swing arm mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, RAL7035 (cool  |
|          |         | grey)  |

### **ACCESSORIES & SPARES**

| VPD-PSU1e  | 0396160 | 24VAC, Internal PSU, 1.5A, non-plugged, encapsulated, 85x66x54.7mm            |
|------------|---------|---|
| VPSU243EXT | 0496080 | 24VAC, External PSU, 3A, ABS IP66, 158x89x78mm                                |
| VPL-B-CLR  | 0478590 | Spare clear bubble for VVRD650, VPL7-WP-SM, VPL7-WP-PM, VK2-VRD & VK2-600PTZ, |
|            |         | RAL7035 (cool grey) trim  |
| VPL-B-SMO  | 0479590 | Spare smoked bubble for VVRD650, VPL7-WP-SM, VPL7-WP-PM, VK2-VRD &            |
|            |         | VK2-600PTZ, RAL7035 (cool grey) trim  |







## **KEY FEATURES - VPL600ECO**

## HIGH RESOLUTION

600TVL colour & monochrome resolutions provides exceptionally good image detail

## AUTO-SENSING MULTI-PROTOCOL RS485 TELEMETRY

Reduces installations times and allows for control from virtually all leading DVRs and matrices

True day/night operation with moving IR cut filter provides high quality colour images during the day and excellent monochrome images at night

Allows near instant recall of a particular area and can be incorporated into the four available tours along with individual motion set up and alarm output

## OSD WITH ADVANCED PROCESSING

With Adaptive Tone Reproduction (ATR), Digital Noise Reduction (2DNR), Back Light Compensation (BLC) and Peak White Inversion (HLC), it ensures that the majority of lighting conditions can be resolved

## MULTIPLE MOUNTING SOLUTIONS

Suitable for either surface or flush fitting from the box with further mounting options available if required



## POWERDOME LITE

## **KEY FEATURES - VPL7**

700TVL (960H) colour & monochrome resolution provides exceptionally good image detail

### **BUILT-IN ALARMS**

4 alarm inputs on the prewired loom make installation very simple, so there is no need to open the dome to the elements and the user defined priority, provides advanced alarm handling

## LOW LIGHT SENSITIVITY & TRUE DAY/NIGHT OPERATION

The low 0.01Lux (Colour) and true day/night operation with moving IR cut filter provides high quality colour images during the day and excellent monochrome images at night

## AUTO SENSING MULTI-PROTOCOL RS485 & COAXIAL FSK (UTC)

The auto sensing ability reduces installation time, whilst a wide choice of protocol options allows control from virtually all leading DVRs and matrices

### 120 PRESETS WITH INDIVIDUAL FUNCTION SET UP

120 preset positions, each with individual function settings covering WDR (Wide Dynamic Range), VMD (Video Motion Detection), BLC (Back Light Compensation), HLC (Peak White Inversion) and brightness control, ensure the best image can be achieved

## PRESET AND PATTERN TOURS

With 4 preset tours and 4 pattern tours providing up to 200secs of 'user defined positioning, allowing movement to cover more or less any application

### PRIVACY ZONES

4 privacy zones allow the masking of sensitive areas, e.g. protection of pin entry in ATM and chip and pin devices



**VPL7-WP-SM** (0474550)



**VPL7-WP-PM** (0475010)



## **POWERDOME LITE**

|                           | VPL600eco                          | VPL7-WP-SM             | VPL7-WP-PM                                 |  |  |  |  |
|---------------------------|------------------------------------|------------------------|--|--|--|--|--|
| Resolution                | 600TVL                             | 70                     | OTVL                                       |  |  |  |  |
| Sensitivity               | 0.5/0.05 lux                       | 0.1/0.01/0.00001 lux   |  |  |  |  |  |
| Optical Zoom              | 22:1                               | Ž                      | 22:1                                       |  |  |  |  |
| Digital Zoom              | x16                                |                        | x16  |  |  |  |  |
| Focal Length              | 3.9-85.8mm                         | 3.9-8                  | 5.8mm                                      |  |  |  |  |
| FSK Protocol              | N/A                                | V                      | ʻista                                      |  |  |  |  |
| RS485 Protocol            | Vista, Pelco P & D                 | Vista, P               | elco P & D                                 |  |  |  |  |
| Max Pan/Tilt Speed        | 0.1 -240°/s                        | O.1 -:                 | 380°/s                                     |  |  |  |  |
| Pan Angle                 | 0-360°                             | O-:                    | 360°                                       |  |  |  |  |
| Presets                   | 120 with titles                    | 120 w                  | ith titles                                 |  |  |  |  |
| Preset Tours              | 4 with titles                      | 4 wit                  | th titles                                  |  |  |  |  |
| Learn Tours               | No                                 | 4 wit                  | th titles                                  |  |  |  |  |
| Areas                     | 8 with titles                      | 8 wit                  | th titles                                  |  |  |  |  |
| Privacy Zones             | No                                 | 4                      |  |  |  |  |  |
| Motion Detection (Preset) |                                    | Yes                    |  |  |  |  |  |
| AutoPan/Scan              | 1 with titles                      | 1/4 with titles        |  |  |  |  |  |
| Home Position             | Preset, Preset Tour or<br>AutoScan | Preset, Preset Tour, L | earn Tour or AutoScan                      |  |  |  |  |
| Alarm Inputs              | 1                                  |                        | 4  |  |  |  |  |
| Alarm Outputs             |                                    | 1                      |  |  |  |  |  |
| Housing Colour            |                                    | RAL7035                |  |  |  |  |  |
| Vandal Resistant Housing  | No                                 | Yes                    |  |  |  |  |  |
| Lower Bubble              |                                    | Clear                  |  |  |  |  |  |
| Current Consumption       | 8W (750mA)                         | 12W                    | 12W (additional<br>45W for heater/fan)     |  |  |  |  |
| Voltage                   | 12VDC                              | 12VDC/24VAC            | Dome 12VDC/24VAC,<br>Heater requires 24VAC |  |  |  |  |
| IP Rating                 | N/A                                | IF                     | P66  |  |  |  |  |
| Vandal resistance         | N/A                                | IK10                   |  |  |  |  |  |



## **POWERDOME**PRO

| VPP-H22C-DF-C                     | 0451570     | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, clear bubble   |
|-----------------------------------|-------------|--|
| VPP-022C-DF-C                     | 0431370     | with white trim. 15W (1,25A/625mA). 24VAC, PSU included, 251x204mm                     |
| VDD H33C DE C                     | 0.451500    |  |
| VPP-H22C-DF-S 0451590             |             | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, smoked bubble  |
|                                   | 0.454600    | with white trim, 15W (1.25A/625mA), 24VAC, PSU included, 251x204mm                     |
| VPP-H22C-DF-CH                    | 0451600     | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, chrome bubble  |
|                                   |             | with white trim, 15W (1.25A/625mA), 24VAC, PSU included, 251x204mm                     |
| VPP-H30D-DF-C                     | 0452460     | True Day Night, 1/4", 550TVL, 0.5 lux, 30x optical zoom, RS485 or coax telemetry, clea |
|                                   |             | bubble with white trim, 15W (1.25A/625mA), 24VAC, PSU included, 251x204mm              |
| VPP-H30D-DF-S                     | 0452470     | True Day Night, 1/4", 550TVL, 0.5 lux, 30x optical zoom, RS485 or coax telemetry,      |
|                                   |             | smoked bubble with white trim, 15W (1.25A/625mA), 24VAC, PSU included, 251x204mr       |
| VPP-H30D-DF-CH                    | 0452480     | True Day Night, 1/4", 550TVL, 0.5 lux, 30x optical zoom, RS485 or coax telemetry,      |
|                                   |             | chrome bubble with white trim, 15W (1.25A/625mA), 24VAC, PSU included, 251x204mr       |
| VPP-H35D-DF-C                     | 0452520     | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry, clea |
|                                   |             | bubble with white trim, 15W (1.25A/625mA), 24VAC, PSU included, 251x204mm              |
| VPP-H35D-DF-S                     | 0452530     | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry,      |
|                                   |             | smoked bubble with white trim, 15W (1.25A/625mA), 24VAC, PSU included, 251x204mr       |
| VPP-H35D-DF-CH                    | 0452540     | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry,      |
|                                   |             | chrome bubble with white trim, 15W (1.25A/625mA), 24VAC, PSU included, 251x204mr       |
| INTERNAL SURFACE<br>VPP-H22C-SM-C | 0452330     | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, white dome,    |
|                                   |             | clear bubble, 15W (1.25A/625mA), 24VAC, PSU included, 283x247mm                        |
| VPP-H22C-SM-S                     | 0452340     | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, white dome,    |
|                                   |             | smoked bubble, 15W (1.25A/625mA), 24VAC, PSU included, 283x247mm                       |
| VPP-H22C-SM-CH                    | 0452350     | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, white dome,    |
|                                   |             | chrome bubble, 15W (1.25A/625mA), 24VAC, PSU included, 283x247mm                       |
| VPP-H30D-SM-C                     | 0452410     | True Day Night, 1/4", 550TVL, 0.5 lux, 30x optical zoom, RS485 or coax telemetry,      |
|                                   |             | white dome, clear bubble, 15W (1.25A/625mA), 24VAC, PSU included, 283x247mm            |
| VPP-H30D-SM-S                     | 0452400     | True Day Night, 1/4", 550TVL, 0.5 lux, 30x optical zoom, RS485 or coax telemetry, whi  |
|                                   |             | dome, smoked bubble, 15W (1.25A/625mA), 24VAC, PSU included, 283x247mm                 |
| VPP-H30D-SM-CH                    | 0452420     | True Day Night, 31/4", 550TVL, 0.5 lux, 0x optical zoom, RS485 or coax telemetry,      |
|                                   |             | white dome, chrome bubble, 15W (1.25A/625mA), 24VAC, PSU included, 283x247mm           |
| VPP-H35D-SM-C                     | 0452500     | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry,      |
|                                   |             | white dome, clear bubble, 15W (1.25A/625mA), 24VAC, PSU included, 283x247mm            |
| VPP-H35D-SM-S                     | 0452490     | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry,      |
|                                   |             | white dome, smoked bubble, 15W (1.25A/625mA), 24VAC, PSU included, 283x247mm           |
| VPP-H35D-SM-CH                    | 0452510     | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry,      |
|                                   |             | white dome, chrome bubble, 15W (1.25A/625mA), 24VAC, PSU included, 283x247mm           |
| INTERNAL WALL/PE                  | NDANT MOUNT |  |
| VPP-H22C-DP-C                     | 0451610     | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, RAL7035 (cool  |
|                                   |             | grey) dome, clear bubble, 15W (1.25A/625mA), 24VAC, PSU included, 308x218mm,           |
|                                   |             | requires bracket   |
| V (DD 11000 DD 0                  |             | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, RAL7035 (cool  |
| VPP-H22C-DP-S                     | 0451620     |  |



## **POWERDOME**PRO

| VPP-H22C-DP-CH | 0451630 | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, RAL7035 (cool |
|----------------|---------|---|
|                |         | grey) dome, chrome bubble, 15W (1.25A/625mA), 24VAC, PSU included, 308x218mm,         |
|                |         | requires bracket  |
| VPP-H30D-DP-C  | 0452430 | True Day Night, 1/4", 550TVL, 0.5 lux lux, 30x optical zoom, RS485 or coax telemetry, |
|                |         | RAL7035 (cool grey) dome, clear bubble, 15W (1.25A/625mA), 24VAC, PSU included,       |
|                |         | 308x218mm, requires bracket   |
| VPP-H30D-DP-S  | 0452440 | True Day Night, 1/4", 550TVL, 0.5 lux lux, 30x optical zoom, RS485 or coax telemetry, |
|                |         | RAL7035 (cool grey) dome, smoked bubble, 15W (1.25A/625mA), 24VAC, PSU included,      |
|                |         | 308x218mm, requires bracket   |
| VPP-H30D-DP-CH | 0452450 | True Day Night, 1/4", 550TVL, 0.5 lux lux, 30x optical zoom, RS485 or coax telemetry, |
|                |         | RAL7035 (cool grey) dome, chrome bubble, 15W (1.25A/625mA), 24VAC, PSU included,      |
|                |         | 308x218mm, requires bracket   |
| VPP-H35D-DP-C  | 0452560 | True Day Night, 1/4", 540TVL,0.5 lux, 35x optical zoom, RS485 or coax telemetry,      |
|                |         | RAL7035 (cool grey) dome, clear bubble, 15W (1.25A/625mA), 24VAC, PSU included,       |
|                |         | 308x218mm, requires bracket   |
| VPP-H35D-DP-S  | 0452550 | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry,     |
|                |         | RAL7035 (cool grey) dome, smoked bubble, 15W (1.25A/625mA), 24VAC, PSU included,      |
|                |         | 308x218mm, requires bracket   |
| VPP-H35D-DP-CH | 0452570 | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry,     |
|                |         | RAL7035 (cool grey) dome, chrome bubble, 15W (1.25A/625mA), 24VAC, PSU included,      |
|                |         | 308x218mm, requires bracket   |
|                |         |   |

## EXTERNAL WALL/PENDANT MOUNT

| VPP-H18D-WP-C | 0470750 | True Day Night, 1/3", 520TVL, 0.25 lux, 18x optical zoom, RS485 or coax telemetry, |
|---------------|---------|--|
|               |         | RAL7035 (cool grey) dome, clear bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66,  |
|               |         | requires PSU & bracket   |
| VPP-H18D-WP-S | 0470760 | True Day Night, 1/3", 520TVL, 0.25 lux, 18x optical zoom, RS485 or coax telemetry, |
|               |         | RAL7035 (cool grey) dome, smoked bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm,       |
|               |         | IP66, requires PSU & bracket   |







**SURFACE MOUNT** 



**PENDANT/WALL MOUNT** 



## **POWERDOME**PRO

| VPP-H22C-WP-C  | 0452120       | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, clear bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66, requires PSU & bracket                              |  |
|----------------|---------------|---|--|
| VPP-H22C-WP-S  | 0452130       | Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, RAL7035 (cogrey) dome, smoked bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66, requires PSU & bracket                                |  |
| VPP-H30D-WP-C  | 0451680       | True Day Night, 1/4", 550TVL, 0.5 lux, 30x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, clear bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP6 requires PSU & bracket                      |  |
| VPP-H30D-WP-S  | 0451690       | True Day Night, 1/4", 550TVL, 0.5 lux, 30x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, smoked bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66, requires PSU & bracket                   |  |
| VPP-H35D-WP-C  | 0451720       | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, clear bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66, requires PSU & bracket                    |  |
| VPP-H35D-WP-S  | 0451730       | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, smoked bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66, requires PSU & bracket                   |  |
| EXTERNAL VANDA | L RESISTANT W | ALL/PENDANT MOUNT   |  |
| VPP-H18D-WV-C  | 0470780       | True Day Night, 1/3", 520TVL, 0.25 lux, 18x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, clear bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66, requires PSU & bracket                   |  |
| VPP-H18D-WV-S  | 0470770       | True Day Night, 1/3", 520TVL, 0.25 lux, 18x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, smoked bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66 (IK10), requires PSU & bracket           |  |
| VPP-H30D-WV-C  | 0451700       | True Day Night, 1/4", 550TVL, 0.5 lux, 30x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, clear bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66 (IK10), requires PSU & bracket             |  |
| VPP-H30D-WV-S  | 0451710       | True Day Night, 1/4", 550TVL, 0.5 lux, 30x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, smoked bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, 308x218mm, IP66 (IK10), requires PSU & bracket |  |
| VPP-H35D-WV-C  | 0451750       | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, clear bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66 (IK10), requires PSU & bracket             |  |
| VPP-H35D-WV-S  | 0451740       | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemet RAL7035 (cool grey) dome, smoked bubble, 65W (5.5A/2.75A), 24VAC, 308x218 IP66 (IK10), requires PSU & bracket                  |  |



## **POWERDOME**PRO

| <b>BLACK EXTERNAL DOME HOUSING - REQUIRES CAMER</b> | A MODULE |
|---|----------|
|---|----------|

| VPP-O-WP-C/B | 0470920 | VPP external black dome housing, clear bubble, 24VAC, 308x218mm, requires camera |  |
|--------------|---------|--|--|
|              |         | module, PSU & bracket  |  |
| VPP-0-WV-C/B | 0470930 | VPP external vandal resistant, black dome housing, smoked bubble, 24VAC,         |  |
|              |         | 308x218mm, requires camera module, PSU & bracket, (IK10)                         |  |

## CAMERA MODULES (For use with black external dome housing)

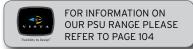
| VPP-H18D 0470790 |         | True Day Night, 1/3", 520TVL, 0.25 lux, 18x optical zoom, requires dome               |  |
|------------------|---------|---|--|
|                  |         | housing & bubble  |  |
| VPP-H22C         | 0451760 | Colour, 1/4", 460TVL, 1 lux, colour, 22x optical zoom, requires dome housing & bubble |  |
| VPP-H30D         | 0451780 | True Day Night, 1/4", 550TVL, 0.5 lux, 30x optical zoom, requires dome                |  |
|                  |         | housing & bubble  |  |
| VPP-H35D         | 0451790 | True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, requires dome housing &      |  |
|                  |         | bubble  |  |
|                  |         |   |  |

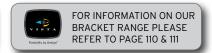
### **DUMMY**

| DOMINIT                |   |  |
|------------------------|---|--|
| VPP-DUMMY-DF-S 0452250 |   | Dummy internal flush ceiling mount VPP dome, RAL7035 (cool grey) dome, smoked  |
|                        |   | bubble   |
| VPP-DUMMY-SM-S         | 0452580   | Dummy internal surface mount VPP dome, RAL7035 (cool grey) dome, smoked bubble |
| VPP-DUMMY-DP-S         | P-DUMMY-DP-S 0452240 Dummy internal pendant/wall mount VPP dome, RA |  |
|                        |   | bubble, requires bracket   |
| VPP-DUMMY-WP-S         | 0452230   | Dummy external VPP dome, RAL7035 (cool grey) dome, smoked bubble, requires     |
|                        |   | bracket  |

## **BRACKETS**

| DRACKETS     |         |  |  |
|--------------|---------|--|--|
| VPL-EWMBe    | 0498960 | Wall mount bracket for VPL7-WP-PM & VPP, RAL7035 (cool grey)                       |  |
| VPP-EWMB     | 0452100 | Wall mount bracket for VPP, RAL7035 (cool grey)                                    |  |
| VPP-EWMB/B   | 0470940 | Wall mount bracket for VPP/B, black  |  |
| VDM-ECMA     | 0457230 | Corner mount adaptor for wall mount brackets, RAL7035 (cool grey)                  |  |
| VDM-ECMA/B   | 0496740 | Corner mount adaptor for wall mount brackets, black                                |  |
| VDM-EPMAg    | 0457240 | Pole mount adaptor for wall mount brackets, requires jubilee clips (not included), |  |
|              |         | RAL7035 (cool grey)  |  |
| VPP-IPMB250  | 0472170 | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 250mm, RAL7035         |  |
|              |         | (cool grey)  |  |
| VPP-IPMB500  | 0472180 | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 500mm, RAL7035         |  |
|              |         | (cool grey)  |  |
| VPP-IPMB1000 | 0472190 | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 1000mm, RAL7035        |  |
|              |         | (cool grey)  |  |
| VPP-IPMB2000 | 0472200 | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 2000mm,                |  |
|              |         | RAL7035 (cool grey)  |  |
| VDM-IPMCA    | 0276270 | Pole mount ceiling adaptor, RAL7035 (cool grey)                                    |  |
| VDM-IPMGA    | 0291100 | Pole mount girder adaptor, RAL7035 (cool grey)                                     |  |







## **POWERDOME**PRO

| VDM-2MP  | 0276240 | 2m pole can be cut to size, RAL7035 (cool grey)                               |  |
|----------|---------|---|--|
| VDM-C    | 0276250 | Coupler to join 2 x VDM-2MP together  |  |
| VPP-IPMA | 0472160 | Pole mount adaptor for VPL7-WP-PM, VPP & VK2-1080PTZHSG, requires VDM-2MP and |  |
|          |         | either VDM-IPMCA or VDM-IPMGA, RAL7035 (cool grey)                            |  |
| VPP-TM   | 0470440 | Tower mount swan neck bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, RAL7035   |  |
|          |         | (cool grey)   |  |
| VPP-TM/B | 0471450 | Tower mount swan neck bracket for VPP/B, black                                |  |
| VPP-ESMB | 0452090 | Swing arm mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, RAL7035 (cool   |  |
|          |         | grey)   |  |

## **ACCESSORIES & SPARES**

| VPD-PSU1e      | 0396160 | 24VAC, Internal PSU, 1.5A, non-plugged, encapsulated, 85x66x54.7mm                    |  |
|----------------|---------|---|--|
| VPSU243EXT     | 0496080 | 24VAC, External PSU, 3A, ABS IP66, 158x89x78mm  |  |
| VPP-RS485      | 0451950 | RS485 PCB , Vista, Pelco P and D protocol (PCB supplied as standard with unit) for VF |  |
| VPP-AD         | 0451960 | RS485 PCB, AD Manchester protocol for VPP   |  |
| VPP-PHILIPS    | 0451970 | RS485 PCB, Philips protocol for VPP   |  |
| VPP-VISTA-C    | 0452000 | Coax PCB, Vista protocol (PCB supplied as standard with unit) for VPP                 |  |
| VPP-BBV-C      | 0451990 | Coax PCB, BBV protocol for VPP  |  |
| VPP-PELCO-Ce   | 0479050 | Coax PCB, Pelco protocol for VPP  |  |
| VPP-CHAIN      | 0470180 | Safety chain adapter  |  |
| VPP-SERVICEKIT | 0496310 | Service kit   |  |
| VPP-DF-B-C     | 0451800 | Clear bubble for internal flush ceiling mount dome                                    |  |
| VPP-DF-B-S     | 0451810 | Smoked bubble for internal flush ceiling mount dome                                   |  |
| VPP-DF-B-CH    | 0451830 | Chrome bubble for internal flush ceiling mount dome                                   |  |
| VPP-DF-B-G     | 0451820 | Gold bubble for internal flush ceiling mount dome                                     |  |
| VPP-SM-B-C     | 0451920 | Clear bubble for internal surface mount dome  |  |
| VPP-SM-B-S     | 0451910 | Smoked bubble for internal surface mount dome   |  |
| VPP-SM-B-CH    | 0451930 | Chrome bubble for internal surface mount dome   |  |
| VPP-SM-B-G     | 0451940 | Gold bubble for internal surface mount dome   |  |
| VPP-P-B-C      | 0451850 | Clear bubble for internal/external pendant mount dome                                 |  |
| VPP-P-B-S      | 0451840 | Smoked bubble for internal/external pendant mount dome                                |  |
| VPP-P-B-CH     | 0451860 | Chrome bubble for internal/external pendant mount dome                                |  |
| VPP-P-B-G      | 0451870 | Gold bubble for internal/external pendant mount dome                                  |  |
| VPP-VP-B-C     | 0451890 | Clear bubble for vandal resistant dome  |  |
| VPP-VP-B-S     | 0451900 | Smoked bubble for vandal resistant dome   |  |
|                |         |   |  |



## POWERDOMEPRO LENS RANGE COMPARISON

The following table shows the differences between the various lens options on the Vista PowerDome<sup>PRO</sup> range.

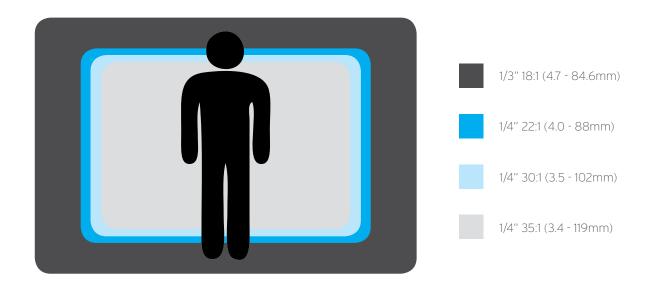
| DESCRIPTION      | FORMAT | FOCAL LENGTH | ANGLE OF VIEW |
|------------------|--------|--------------|---------------|
| 18:1 Day / Night | 1/3"   | 4.7 - 84.6mm | 3.1° - 54.7°  |
| 22:1 Colour      | 1/4"   | 4.0 - 88mm   | 2.2° - 47.3°  |
| 30:1 Day / Night | 1/4"   | 3.5 - 102mm  | 2.0° - 55.8°  |
| 35:1 Day / Night | 1/4"   | 3.4 - 119mm  | 1.7° - 55.8°  |

Viewing area at 50m distance from camera when fully zoomed in:

## **CAMERA MODULE**

## AREA VIEWED WHEN FULLY ZOOMED AT 50m

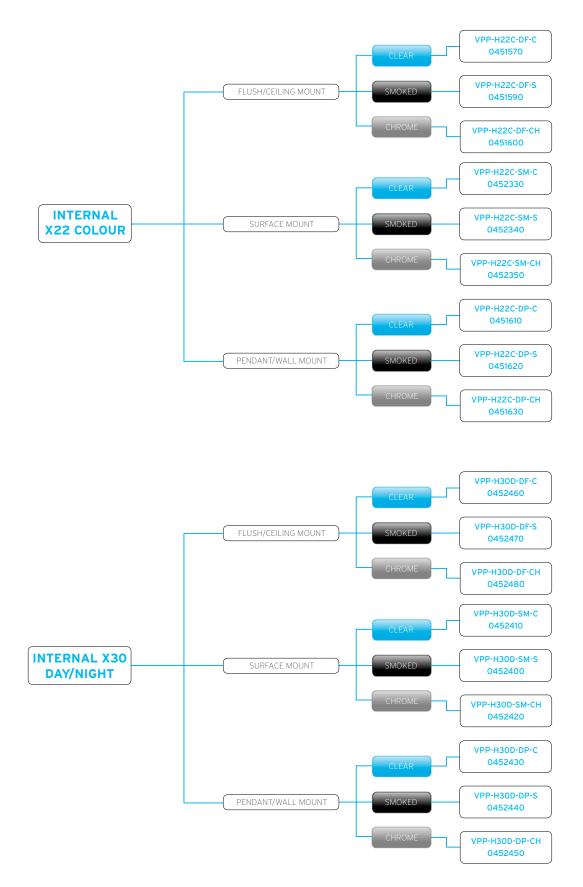
| 18:1 Day / Night | Vertical - 2.05m by Horizontal - 2.75m |
|------------------|--|
| 22:1 Colour      | Vertical - 1.49m by Horizontal - 1.95m |
| 30:1 Day / Night | Vertical - 1.30m by Horizontal - 1.75m |
| 35:1 Day / Night | Vertical - 1.15m by Horizontal - 1.50m |



The rectangles above show how much of a 1.8m tall person would be viewed at a 50m range if the dome is zoomed in to its full extent.



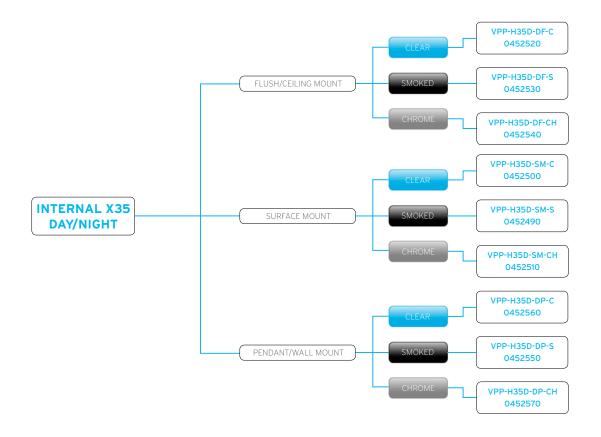
## POWERDOMEPRO CONFIGURATOR - INTERNAL DOMES



# ANALOGUE FULLY FUNCTIONAL DOMES



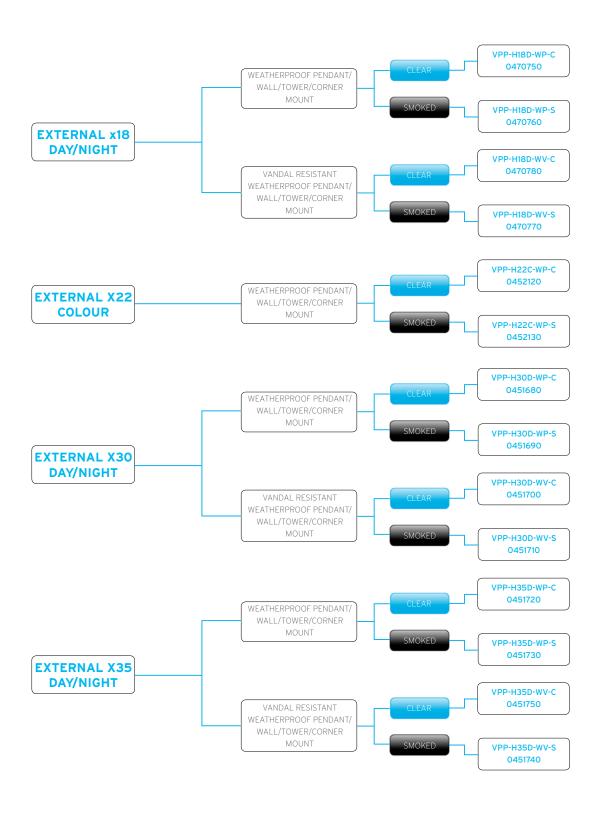
# POWERDOMEPRO CONFIGURATOR - INTERNAL DOMES



# ANALOGUE FULLY FUNCTIONAL DOMES



# POWERDOMEPRO CONFIGURATOR - EXTERNAL DOMES



# ANALOGUE FULLY FUNCTIONAL DOMES



# POWERDOMEPRO COMPARISON CHART

|                             | x22 Colour  | x18 Day/Night   | x30 Day/Night   | x35 Day/Night   |
|-----------------------------|---|---|---|---|
| Image Sensor                | 1/4" Hitachi  | 1/3" Hitachi  | 1/4" Hitachi  | 1/4" Hitachi  |
| Resolution                  | 460TVL  | 520TVL  | 550TVL  | 540TVL  |
| Sensitivity                 | 1 lux   | 0.25 lux BW   | 0.5 lux BW  | 0.5 lux BW  |
| WDR                         | No  | No  | Yes   | Yes   |
| Optical Zoom                | 22:1  | 18:1  | 30:1  | 35:1  |
| Digital Zoom                | x12   | x12   | x12   | x12   |
| Focal Length                | 4-88mm  | 4.7-84.6mm  | 3.5-102mm   | 3.4-119mm   |
| FSK Protocol                | Vista as standard, BBV and<br>Pelco optional PCB                            |
| RS485 Protocol              | Vista, Pelco P & D as<br>standard, AD Manchester &<br>Phillips optional PCB | Vista, Pelco P & D as<br>standard, AD Manchester &<br>Phillips optional PCB | Vista, Pelco P & D as<br>standard, AD Manchester &<br>Phillips optional PCB | Vista, Pelco P & D as<br>standard, AD Manchester &<br>Phillips optional PCB |
| Back-Box Memory             | Yes   | Yes   | Yes   | Yes   |
| Manual Pan/Tilt Speed       | 0.1-160°/s  | 0.1-160°/s  | 0.1-160°/s  | 0.1-160°/s  |
| Preset Speed                | 360°/s  | 360°/s  | 360°/s  | 360°/s  |
| Pan Angle                   | 0-360°  | 0-360°  | 0-360°  | 0-360°  |
| Tilt Angle                  | 0-95°   | 0-95°   | 0-95°   | 0-95°   |
| Auto Flip                   | Yes   | Yes   | Yes   | Yes   |
| Still Shot                  | Yes   | Yes   | Yes   | Yes   |
| Presets                     | 220 with titles   | 220 with titles   | 220 with titles   | 220 with titles   |
| Preset Tours                | 4 with titles   | 4 with titles   | 4 with titles   | 4 with titles   |
| Learn Tours                 | 4 with titles   | 4 with titles   | 4 with titles   | 4 with titles   |
| Areas                       | 8 with titles   | 8 with titles   | 8 with titles   | 8 with titles   |
| Privacy Zones               | 8 with titles   | 8 with titles   | 8 with titles   | 8 with titles   |
| AutoPan                     | 4 with titles   | 4 with titles   | 4 with titles   | 4 with titles   |
| Home Position               | Preset, Preset Tour, Learn<br>Tour or AutoPan                               |
| Time and Date               | Yes   | Yes   | Yes   | Yes   |
| Scheduled Commands          | 8 fully programmable -<br>Preset, Preset Tour,<br>Learn Tour or AutoPan     | 8 fully programmable -<br>Preset, Preset Tour,<br>Learn Tour or AutoPan     | 8 fully programmable -<br>Preset, Preset Tour, Learn<br>Tour or AutoPan     | 8 fully programmable -<br>Preset, Preset Tour, Learn<br>Tour or AutoPan     |
| Alarm Inputs                | 7   | 7   | 7   | 7   |
| Alarm Outputs               | 2   | 2   | 2   | 2   |
| Top Housing Colour          | RAL7035 or Black  | RAL7035 or Black  | RAL7035 or Black  | RAL7035 or Black  |
| Vandal Resistant<br>Housing | No  | Optional<br>(IK10)  | Optional<br>(IK10)  | Optional<br>(IK10)  |
| Internal Lower Bubble       | Clear, Smoked, Chrome or<br>Gold options                                    | N/A   | Clear, Smoked, Chrome or<br>Gold option                                     | Clear, Smoked, Chrome or<br>Gold options                                    |
| External Lower Bubble       | Clear or Smoked option  | Clear or Smoked options   | Clear or Smoked options   | Clear or Smoked options   |
| Current Consumption         | 15W, 65W with heater  |
| Voltage                     | 24VAC   | 24VAC   | 24VAC   | 24VAC   |
| IP Rating                   | IP66 applies to external dome   | IP66 applies to external dome   | IP66 applies to external dome   | IP66 applies to external<br>dome  |



# **COMPACT CAMERAS**

| VK2-2MPCCW  | 0474680 | Colour Mono 1/4", 2MP (1600x1200) 4:3, 0.6 lux, 2.6mm, H.264/MJPEG, triple                |
|-------------|---------|---|
| NEW         |         | streaming, 12ips @ 2MP, micro SD card slot for local recording, OSD, motion detection,    |
|             |         | WiFi, black/white case, 3W (60mA), 5VDC, 60x100x36mm, PSU and software included           |
| VK2-2MPCCPL | 0474670 | Colour Mono 1/4", 2MP (1600x1200) 4:3, 0 lux, 2.6mm, H.264/MJPEG, triple streaming,       |
| NEW         |         | 12ips @ 2MP, micro SD card slot for local recording, OSD, motion detection, audio in/out, |
|             |         | white light LED, PIR, black/white case, 3W (60mA), PoE/5VDC, 60x100x36mm, PSU and         |
|             |         | software included   |



VK2-2MPCCW (0474680)



VK2-2MPCCPL (0474670)

# **KEY FEATURES - VK2-2MPCC**

# 2MP (1600X1200) RESOLUTION

This delivers outstanding picture quality

The VK2-2MPCCW can transmit video over a wireless network, greatly reducing the cabling requirements, only local power is required

The VK2-2MPCCPL can use PoE switches to power the camera, greatly simplifying any installation

The VK2-2MPCCPL has a built in PIR which can be used to trigger recordings and switch on the white light LED illuminator

### RECORDING FLEXIBILITY

Event recordings can be made locally to the optional micro SD

# SMALL DISCRETE COMPACT HOUSING

The small aesthetic housing makes the cameras ideal for domestic or style conscious installations

# ONVIF CERTIFICATION

The VK2-2MPCCs are tested and certified to the latest version of ONVIF which simplifies the integration of the camera into third party software front ends that are also ONVIF compatible



# IP ENCODER

# **IP TRANSMISSION**

| VK2-ENCODER | 0471760 | 1 channel IP encoder, MJPEG, MPEG4, H.264, 5W, PoE/12VDC/24VAC, 155x40x102.4mm, |
|-------------|---------|---|
|             |         | software included   |



# VK2-ENCODER (0471760)

# **KEY FEATURES - VK2-ENCODER**

Highly efficient compression for top quality images at low bandwidth, >25% more efficient than MPEG4.

Power over Ethernet, allows installation over single CAT5 cable

# **DUAL STREAMING**

Send 2 separate video streams simultaneously in H.264, MPEG4 or MJPEG with independent control on frame rate and bandwidth

# SIMPLE TO USE

Operation via well-established PC-based system

## PART OF VK2 RANGE

Similar look and feel across whole range

HIGH QUALITY - HIGH FRAME RATE Capable of displaying and recording images real time up to 25ips at D1 resolution

# IP CAMERAS



# **BOX CAMERAS**

| VGA (640x480) RES                      | SOLUTION           |  |
|--|--------------------|--|
| VK2-VGABX                              | 0473240            | Colour Mono, 1/4", VGA (640x480) 4:3, 1.0 lux, DD, H.264/MJPEG, IP output,                                 |
|  |                    | dual streaming, 25ips @ VGA, micro SD card slot for local recording, AGC, flickerless,                     |
|  |                    | motion detection, privacy zones, alarm in/out, audio in/out, silver case, 4W (333mA),                      |
|  |                    | PoE/12VDC, 66x56x120mm, software included  |
| D1 (720x576) RESOL                     | LUTION             |  |
| VK2-540BX                              | 0471730            | True Day Night, 1/3", D1 (720x576) 4:3, 0.25/0.01 lux, sense-up, DD, H.264/MJPEG,                          |
|  |                    | IP/analogue output, dual streaming, 25ips @ D1, OSD, DWDR, DNR, AGC, BLC, flickerless                      |
|  |                    | PWI, motion detection, privacy zones, alarm in/out, audio in/out, RAL7035 (cool grey)                      |
|  |                    | case, 6.5W (540mA), PoE/12VDC/24VAC, 70x60x124.5mm, software included                                      |
| 2MP (1600X1200) R                      | ESOLUTION          |  |
| VK2-2MPBX                              | 0473030            | Colour Mono 1/3.2", 2MP (1600x1200) 4:3, 0.6 lux, DD, H.264/MJPEG, IP/analogue                             |
|  |                    | output, dual encoding, quad streaming, 25ips @ 2MP, micro SD card slot for local                           |
|  |                    | recording, OSD, AGC, BLC, motion detection, privacy zones, ROI analytics, alarm in/out,                    |
|  |                    | audio in/out, silver case, 4.2W (350mA), PoE/12VDC/24VAC, 68x81.6x123.1mm, software                        |
|  |                    | included   |
| VK2-2MPBX(DN)                          | 0473120            | True Day Night, 1/3.2", 2MP (1600x1200) 4:3, 0.6 lux, DD, H.264/MJPEG, IP/analogue                         |
|  |                    | output, dual encoding, quad streaming, 25ips @ 2MP, micro SD card slot for local                           |
|  |                    | recording, OSD, AGC, BLC, motion detection, privacy zones, ROI analytics, alarm in/out                     |
|  |                    | audio in/out, silver case, 4.2W (350mA), PoE/12VDC/24VAC, 68x81.6x123.1mm, software                        |
|  |                    | included   |
| FULL HD (1920X108                      | Op) RESOLUTIO      | N.   |
| VK2-1080BX(DN)                         | 0473540            | True Day Night, 1/2.8", Full HD (1920x1080p) 16:9, 0.09/0.02 lux, DD, H.264/MJPEG,                         |
|  |                    | IP/analogue output, quad streaming, 25ips @ 2MP, SD card slot for local recording,                         |
|  |                    | OSD, DWDR, AGC, BLC, motion detection, privacy zones, ROI analytics, alarm in/                             |
|  |                    | out, audio in/out, silver case, 5.5W (458mA), PoE/12VDC/24VAC, 68x81.6x123.1mm,                            |
|  |                    | software included  |
| LENSES - DIRECT DI                     | RIVE               |  |
|  | 0471010            | 1/3", CS, 2.4-6.0mm, F1.2-360, DD, plugged, 23cm lead, MEGA-PIXEL  |
| VDD24V612P-MP                          |                    |  |
| VDD24V612P-MP<br>VDD31V812IRP-3MP      | 0478870            | 1/2.7", CS, 3.1-8.0mm, F1.2-360, DD, plugged, 12cm lead, 3 MEGA-PIXEL                                      |
| VDD31V812IRP-3MP                       | 0478870            | 1/2.7", CS, 3.1-8.0mm, F1.2-360, DD, plugged, 12cm lead, 3 MEGA-PIXEL                                      |
| VDD31V812IRP-3MP  BRACKETS             | 0478870<br>0032650 | 1/2.7", CS, 3.1-8.0mm, F1.2-360, DD, plugged, 12cm lead, 3 MEGA-PIXEL 5.5", wall/ceiling, auto lock, black |
|  |                    |  |
| VDD31V812IRP-3MP  BRACKETS  VB1B  VB1W | 0032650            | 5.5", wall/ceiling, auto lock, black   |
| VDD31V812IRP-3MP  BRACKETS  VB1B       | 0032650<br>0032630 | 5.5", wall/ceiling, auto lock, black<br>5.5", wall/ceiling, auto lock, white                               |



# **BOX CAMERAS**

| COLOUR MONO    | RESOLUTION                      | SENSITIVITY (LUX) | ANALOGUE OUTPUT | STREAMING | FPS         | ON-BOARD RECORDING | DWDR | BLC | PWI | MOTION DETECTION | PRIVACY ZONES | ANALYTICS ALARM IN/OUT | AUDIO IN/OUT | HOUSING COLOUR         | VOLTAGE    |
|----------------|---------------------------------|-------------------|-----------------|-----------|-------------|--------------------|------|-----|-----|------------------|---------------|------------------------|--------------|------------------------|------------|
| VK2-VGABX      | VGA<br>(640x480)<br>4:3         | 1.0               |                 | Dual      | 25 @<br>VGA | Micro<br>SD        |      |     |     | •                | •             |                        | •            | Silver                 | PoE/12V    |
| VK2-2MPBX(CM)  | 2MP<br>(1600x1200)<br>4:3       | 0.6               | •               | Quad      | 25 @<br>2MP | SD                 |      | •   |     | •                | •             | •                      | •            | Silver                 | PoE/12/24V |
| TRUE DAY NIGHT |                                 |                   |                 |           |             |                    |      |     |     |                  |               |                        |              |                        |            |
| VK2-540BX      | D1 (720x576)<br>4:3             | 0.25/0.01         | •               | Dual      | 25 @<br>D1  |                    | •    | •   | •   | •                | •             |                        | •            | RAL7035<br>(cool grey) | PoE/12/24V |
| VK2-2MPBX(DN)  | 2MP<br>(1600x1200)<br>4:3       | 0.6               | •               | Quad      | 25 @<br>2MP | SD                 |      | •   |     | •                | •             | •                      | •            | Silver                 | PoE/12/24V |
| VK2-1080BX(DN) | Full HD<br>(1920x1080p)<br>16:9 | 0.09/0.02         | •               | Quad      | 25 @<br>2MP | SD                 | •    | •   |     | •                | •             | •                      | •            | Silver                 | PoE/12/24V |

## KEY FEATURES - VK2-1080BX(DN)

FULL HD (1920X1080) RESOLUTION
Full HD resolution allows the ability to view extremely high quality images both live and recorded. Areas of interest within an image can be zoomed into, with very little loss of detail

ONVIF compliance assures seamless integration to third party devices

### POF FOUIPPED

Using the latest poE technology, cameras can be powered via the network without the need for local fused spurs to be installed, greatly simplifying any installation

# RECORDING FLEXIBILITY

Recording can be controlled manually or triggered via alarm input, with images streamed in both H.264 and MJPEG formats up to 30 images per second (ips)

### DUAL STANDARD

Providing both analogue and IP video outputs the VK2-1080BXDN can connect to both new and old technologies

A SD memory card can be inserted into the camera and used to record events which can be triggered manually, by motion or external alarm triggers (SD card not included)



VK2-1080BX(DN) (lens not included) (0473540)



# **BULLET CAMERA**

| VK2-1080BIR37   | 0479960 | True Day Night, 1/2.8", Full HD (1920x1080p) 16:9, 2.5/0 lux, 3.7mm, DD, H.264/MJPEG, analogue output for set up, triple streaming, 25ips @ 1080p, micro SD card slot for local recording, service jack, OSD, DWDR, DNR, AGC, BLC, motion detection, privacy zones, alarm in/out, 24 LEDs, up to 15m range, silver case, 6W (500mA), PoE/12VDC/24VAC, 60x170mm, IP66, software included  |
|-----------------|---------|--|
| VK2-1080BIR3V9F | 0474560 | True Day Night, 1/2.8", Full HD (1920x1080p) 16:9, 2.5/0 lux, 3-9mm, DD, motorised remote focus and zoom, H.264/MJPEG, analogue output for set up, triple streaming, 25ips @ 1080p, micro SD card slot for local recording, service jack, OSD, DWDR, DNR, AGC, BLC, motion detection, privacy zones, 36 LEDs, up to 15m range, silver case, 4.3W (500mA) / 24W (2A) with heater (@12VDC), PoE/12VDC, 290.4x177.5x98.4mm, IP66, software included |
| ACCESSORIES & S | SPARES  |  |
| VK2-LCT         | 0498270 | VK2 Local Commissioning Tool compatible with VK2-1080VFD, VK2-1080BIR37, VK2-1080BIR3V9F, VK2-1080VRD3V9 & VK2-1080VRDIR3V9F   |

# KEY FEATURES - VK2-1080BIR

### TRIPLE STREAMING FULL HD (1920X1080) RESOLUTION

3 independent full HD 1080p video streams at 25ips

# **ONVIF COMPLIANT**

ONVIF compliance assures seamless integration to third party

The IR illuminators guarantee usable images 24/7 at a range of up to 10m (BIR37) & 15m (BIR3V9F). In addition the BIR3V9F lens automatically re-focuses when the camera switches from day to night mode, this compensates for any focus shift

# REMOTE LENS SET UP (BIR3V9F)

This allows the angle of view and focus to be adjusted from a remote PC

# POE EQUIPPED

Using the latest PoE technology, cameras can be powered via the network cable without the need for local PSUs - greatly simplifying

### RECORDING FLEXIBILITY

Recording can be controlled manually or triggered via alarm input, with images streamed in H.264, MPEG 4 and MJPEG formats up to 25 images per second (IPS)

### ON-BOARD SD CARD

Images can be recorded locally (edge recording) via an on-board Micro SD card slot, triggered via on board VMD or external triggers (SD card not included)



VK2-1080BIR37 (0479960)



VK2-1080BIR3V9F (0474560)



# INTEGRATED ZOOM CAMERA

| VK2-720VZMI | 0473550 | True Day Night, 1/3", HD (1280x720p) 4:3/16:9, 0.5/0.02 lux, x18 4.7-84.6mm optical zoom lens, H.264/MJPEG, analogue output, quad streaming, 25ips @ 1.3MP, SD card slot for local recording, OSD, DWDR, AGC, BLC, motion detection, privacy zones, ROI analytics, alarm in/out, audio in/out, silver case, 6W (500mA), PoE/12VDC/24VAC, 130x220x135mm, software included  |
|-------------|---------|--|
| VK2-720VZMX | 0473560 | True Day Night, 1/3", HD (1280x720p) 4:3/16:9, 0.5/0.02 lux, x18 4.7-84.6mm optical zoom lens, H.264/MJPEG, analogue output, quad streaming, 25ips @ 1.3MP, micro SD card slot for local recording, OSD, DWDR, AGC, BLC, 20 LED's up to 15m range, motion detection, privacy zones, ROI analytics, alarm in/out, audio in/out, silver case, 11W (900mA), PoE/12VDC/24VAC, 130x220x135mm, bracket & software included |







**VK2-720VZMX** (0473560)

# KEY FEATURES - VK2-720VZM

# 1.3MP IMAGERY

Megapixel technology affords large scene coverage and ultimate detail for retrospective review

Using the latest PoE technology, cameras can be powered via the network without the need for local fused spurs to be installed, greatly simplifying any installation

ONVIF compliance assures seamless integration to third party devices

# MULTI STREAMING

4 Independently controllable IP streams of either h.264 or MJPEG can be used by the operator

The powerful 18:1 zoom lens can be controlled manually or preset positions can be called on alarm

TRUE DAY/NIGHT OPERATION (IR ON VK2-720VZMX)
With the inclusion of a removable IR cut filter the camera can utilize IR illumination to guarantee crisp images 24/7. The VK2-720VZMX includes programmable IR illumination up to 15m range

# RECORDING FLEXIBILITY

Recording onto the internal SD card (card not included) can be controlled manually or triggered via alarm input or motion detection, with images streamed in both H.264 and MJPEG formats up to 30ips@1280x720p

Providing both analogue and IP video outputs the VK2-720VZM can connect to both new and old technologies 3 independent full HD 1080p video streams at 25ips



# 360° CAMERAS

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|---|---------------|---|----|-----|----|-----|
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|   |               |   |    |     |    |     |

| 360° CAMERA      |         |  |
|------------------|---------|--|
| Eclipse2         | 0479040 | Colour Mono 360 deg camera, 1/2.5", 5MP (2144x1944) 4:3, 0.5 lux, MJPEG & H.264/MPEG4, dual streaming, 12ips @ 5MP, OSD, privacy zones, alarm in/out, RAL7035 case, 6W (500mA), PoE/12-24VDC, 147.5x54mm, dewarping feature via Smart, Graphica 2 or other 3rd party compatible software                           |
| Eclipse2X        | 0498070 | True Day Night, external 360 deg camera, 1/2.5", 5MP (2144x1944) 4:3, 0.5 lux, MJPEG & H.264/MPEG4, dual streaming, 12ips @ 5MP, OSD, privacy zones, alarm in/out, RAL7035 case, 6W (500mA), PoE/12-24VDC, 147.5x75mm, IP66 & IK10, dewarping feature via Smart, Graphica 2 or other 3rd party compatible software |
| BRACKETS         |         |  |
| VVRD/VPL7-SPACER | 0498380 | Ceiling spacer for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2, RAL7035 (cool grey), 3/4 NPT side conduit hole, 146x38mm   |
| Eclipse2-FM      | 0498090 | False ceiling mount kit for Eclipse2, RAL7035 (cool grey)  |
| VVRD-EWMB1       | 0479030 | Wall bracket (low profile) for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2, RAL7035 (cool grey)  |
| VRD-EWMB         | 0498930 | Wall mount bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2, RAL7035 (cool grey)  |
| VDM-ECMA         | 0457230 | Corner mount adaptor for wall mount brackets, RAL7035 (cool grey)  |
| VDM-EPMAg        | 0457240 | Pole mount adaptor for wall mount brackets, requires jubilee clips (not included), RAL7035 (cool grey)   |
| VRD-EPMB         | 0498940 | Pendant mount bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2, RAL7035 (cool grey)   |
| VDM-IPMCA        | 0276270 | Pole mount ceiling adaptor, RAL7035 (cool grey)  |
| VDM-IPMGA        | 0291100 | Pole mount girder adaptor, RAL7035 (cool grey)   |
| VDM-2MP          | 0276240 | 2m pole can be cut to size, RAL7035 (cool grey)  |
| VDM-C            | 0276250 | Coupler to join 2 x VDM-2MP together   |
| VPL-IPMA         | 0291180 | Pole mount adaptor for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2, requires VDM-2MP and either VDM-IPMCA or VDM-IPMGA, RAL7035 (cool grey)  |
| VRD-TM           | 0498950 | Tower mount swan neck bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2, RAL7035 (cool grey)   |

# **ACCESSORIES & SPARES**

Eclipse2X-Bub 0498080 Spare clear bubble for Eclipse2X, IK10







De-warped (ePTZ)



# 360° CAMERAS





**Fisheye** 



Eclipse2 (0479040)



Eclipse2X (0498070)

# **KEY FEATURES - ECLIPSE2**

# EPTZ FUNCTIONALITY

Electronically Pan, Tilt and Zoom a full 360° horizontally and 185° vertically in both live and recorded images

# INTERNAL CAMERA DE-WARPING

Live colour or monochrome images can be viewed from a standard web browser without the need for specific software

### 5 MEGAPIXEL RESOLUTION

Ensures the entire scene can be clearly viewed and interrogated

# MULTIPLE STREAMING

Up to 14 simultaneous panoramic and ePTZ streams in either MJPEG, H.264 or MPEG-4 encoding formats

# NVR & VMS INTEGRATION

API and SDK allows for integration into 3rd party devices

### PRIVACY ZONES

10 dynamic privacy zones applied to all IP streams, ensure details

# TRUE DAY/NIGHT OPERATION

The notched IR filter allows the camera to work with 850nm IR illumination, providing excellent quality images day or night

# WEATHERPROOF & VANDAL RESISTANT

With an IP66 rating and built to IK10, the external Eclipse2X allows the camera to be used both externally and internally in vandalism prone areas

# IP FIXED DOMES



# **FIXED DOMES - INTERNAL**

| VK2-VGAVFD/BCB | 0473060 | Colour Mono, 1/4", VGA (640x480) 4:3, 1.0 lux, 2.8-12mm, DD, H.264/MJPEG, triple          |
|----------------|---------|---|
|                |         | streaming, 25ips @ VGA, micro SD card slot for local recording, 3-Axis, AGC, flickerless, |
|                |         | motion detection, privacy zones, alarm in/out, black housing, clear bubble, black liner,  |
|                |         |   |

4W (333mA), PoE/12VDC, 119x105mm, software included Colour Mono, 1/4", VGA (640x480) 4:3, 1.0 lux, 2.8-12mm, DD, H.264/MJPEG, triple VK2-VGAVFD/WCW 0473070 streaming, 25ips @ VGA, micro SD card slot for local recording, 3-Axis, AGC, flickerless,

4W (333mA), PoE/12VDC, 119x105mm, software included

motion detection, privacy zones, alarm in/out, white housing, clear bubble, white liner,

### 1 (720vE76) DECOLUTION

VGA (640x480) RESOLUTION

| D1 (720x576) RESOL | LUTION  |   |
|--------------------|---------|---|
| VK2-540VFD/BCB     | 0473570 | Colour Mono, 1/3", D1 (720x576) 4:3, 1.0 lux, 2.8-12mm, DD, H.264/MJPEG,                |
|                    |         | analogue output, dual streaming, 25ips @ D1, micro SD card slot for local recording,    |
|                    |         | 3-Axis, AGC, flickerless, motion detection, privacy zones, alarm in/out, black housing, |
|                    |         | clear bubble, black liner, 4W (333mA), PoE/12VDC, 119x105mm, software included          |
| VK2-540VFD/WCW     | 0473580 | Colour Mono, 1/3", D1 (720x576) 4:3, 1.0 lux, 2.8-12mm, DD, H.264/MJPEG,                |
|                    |         | analogue output, dual streaming, 25ips @ D1, micro SD card slot for local recording,    |
|                    |         | 3-Axis, AGC, flickerless, motion detection, privacy zones, alarm in/out, white housing, |
|                    |         | clear bubble, white liner, 4W (333mA), PoE/12VDC, 119x105mm, software included          |

# FULL HD (1920X1080p) RESOLUTION

| VK2-1080VFD/BCB | 0473990 | Colour Mono, 1/2.7", Full HD (1920x1080p) 16:9, 2.5/0.2 lux, 3-9mm, DD, H.264/                |
|-----------------|---------|---|
|                 |         | MJPEG, analogue output for set up, triple streaming, 25ips @ 1080p, micro SD card slot        |
|                 |         | for local recording, 3-Axis, service jack, AGC, flickerless, motion detection, privacy        |
|                 |         | zones, alarm in/out, black housing, clear bubble, black liner, 4W (333mA), PoE/12VDC,         |
|                 |         | 119x105mm, software included  |
| VK2-1080VFD/WCW | 0473980 | Colour Mono, 1/2.7", Full HD (1920x1080p) 16:9, 2.5/0.2 lux, 3-9mm, DD, H.264/                |
|                 |         | MJPEG, analogue output for set up, triple streaming, 25ips @ 1080p, micro SD card slot        |
|                 |         | for local recording, 3-Axis, service jack, AGC, flickerless, motion detection, privacy zones, |
|                 |         | alarm in/out, white housing, clear bubble, white liner, 4W (333mA), PoE/12VDC,                |
|                 |         | 119x105mm, software included  |

# **KEY FEATURES - VK2-VFD**

### **RESOLUTION**

VGA, D1 or Full HD (1080p) picture quality provides you with a choice of resolution for almost every application

Using the latest PoE technology, cameras can be powered without the need for local fused spurs to be installed - greatly simplifying any installation

Recording can be controlled manually or triggered via alarm input, with images streamed in both H.264 and MPEG4 formats up to 25 images per second (ips)

# WIDELY COMPATIBLE

The VK2-1080VFD, as with the rest of the VK2 range, is supplied with its own FOC viewing and recording client, and is compatible with: Graphica2, Sabre, Milestone, Mirasys and other 3rd party software front ends

**BLACK VK2-VFD** DOME WITH CLEAR **BUBBLE AND BLACK INNER LINER (ALSO AVAILABLE IN WHITE)** 



The VK2-VFD is tested and certified to the latest version of ONVIF which simplifies the integration of the camera into third party software front ends that are also ONVIF compatible

### AN ECONOMICAL OPTION

As with the rest of the VK2 range, the Vista VK2-VFD range employs features usually seen on only the most expensive units

# IP FIXED DOMES



# **FIXED DOMES - INTERNAL**

| COLOUR MONO     | RESOLUTION                      | SENSITIVITY (LUX) | LENS (mm) | ANALOGUE OUTPUT | STREAMING | <u>Sa</u> | ON-BOARD RECORDING | 3-AXIS | SERVICE JACK | MOTION DETECTION | PRIVACY ZONES | ALARM IN/OUT | HOUSING COLOUR | BUBBLE COLOUR | LINER COLOUR | VOLTAGE |
|-----------------|---------------------------------|-------------------|-----------|-----------------|-----------|-----------|--------------------|--------|--------------|------------------|---------------|--------------|----------------|---------------|--------------|---------|
| VK2-VGAVFD/BCB  | VGA<br>(640x480)<br>4:3         | 1.0               | 2.8-12    |                 | Triple    | 25@VGA    | Micro<br>SD        | •      |              | •                | •             | •            | Black          | Clear         | Black        | PoE/12V |
| VK2-VGAVFD/WCW  | VGA<br>(640x480)<br>4:3         | 1.0               | 2.8-12    |                 | Triple    | 25@VGA    | Micro<br>SD        | •      |              | •                | •             | •            | White          | Clear         | White        | PoE/12V |
| VK2-540VFD/BCB  | D1 (720x576)<br>4:3             | 1.0               | 2.8-12    | •               | Dual      | 25@D1     | Micro<br>SD        | •      |              | •                | •             | •            | Black          | Clear         | Black        | PoE/12V |
| VK2-540VFD/WCW  | D1 (720x576)<br>4:3             | 1.0               | 2.8-12    | •               | Dual      | 25@D1     | Micro<br>SD        | •      |              | •                | •             | •            | White          | Clear         | White        | PoE/12V |
| VK2-1080VFD/BCB | Full HD<br>(1920x1080p)<br>16:9 | 2.5/0.2           | 3-9       | •               | Triple    | 25@1080p  | Micro<br>SD        | •      | •            | •                | •             | •            | Black          | Clear         | Black        | PoE/12V |
| VK2-1080VFD/WCW | Full HD<br>(1920x1080p)<br>16:9 | 2.5/0.2           | 3-9       | •               | Triple    | 25@1080p  | Micro<br>SD        | •      | •            | •                | •             | •            | White          | Clear         | White        | PoE/12V |

|  | VI. |  |  |
|--|-----|--|--|
|  |     |  |  |

VFDAS-BSB-D

0471420

| 0471430 | Dummy VK2-VFD dome, white housing, clear bubble, white liner, 119x105mm |
|---------|---|
|         |   |
|         |   |
|         |   |
| 0276270 | Pole mount ceiling adaptor, RAL7035 (cool grey)                         |
| 0291100 | Pole mount girder adaptor, RAL7035 (cool grey)                          |
| 0276240 | 2m pole can be cut to size, RAL7035 (cool grey)                         |
| 0276250 | Coupler to join 2 x VDM-2MP together                                    |
| 0496980 | Pole mount adaptor for VK2-VFD, requires VDM-2MP and either VDM-IPMCA   |
|         | or VDM-IPMGA, RAL7035 (cool grey)                                       |
| (       | )496980   |

Dummy VK2-VFD dome, black housing, smoked bubble, black liner, 119x105mm

# **ACCESSORIES & SPARES**

| VK2-LCT       | 0498270 | VK2 Local Commissioning Tool compatible with VK2-1080VFD, VK2-1080BIR37, |
|---------------|---------|--|
|               |         | VK2-1080BIR3V9F, VK2-1080VRD3V9 & VK2-1080VRDIR3V9F                      |
| VFDAS-B-B-CLR | 0478560 | Spare clear bubble for VK2-VFD, black trim, no liner                     |
| VFDAS-B-B-SMO | 0478580 | Spare smoked bubble for VK2-VFD, black trim, no liner                    |
| VFDAS-B-W-CLR | 0478570 | Spare clear bubble for VK2-VFD Bubble, white trim, no liner              |





# FIXED DOMES - VANDAL RESISTANT

| D1 / | (720x576) | DESO   | LUTION |
|------|-----------|--------|--------|
| יוט  | (/2UX3/6  | ) RESU | LUTION |

| VK2-540VRD         | 0471750      | True Day Night, 1/3", D1 (720x576) 4:3, 0.25/0.01 lux, sense-up, 3-9mm, DD,  |
|--------------------|--------------|--|
|                    |              | H.264/MJPEG, analogue output, dual streaming, 25ips @ D1, 3-Axis, OSD, DWDR,   |
|                    |              | DNR, AGC, BLC, flickerless, PWI, motion detection, privacy zones, alarm in/out, audio in/  |
|                    |              | out, RAL7035 (cool grey) housing, clear bubble, 6.5W (550mA), PoE/12VDC/24VAC,   |
|                    |              | 150x125mm, IP66 (IK10), software included  |
|                    |              |  |
| FULL HD (1920X1080 | p) RESOLUTIO | N  |
| VK2-1080VRD3V9     | 0474620      | True Day Night, 1/2.8", Full HD (1920x1080p) 16:9, 2.5/0.2 lux, 3-9mm, DD, H.264/  |
| NEW                |              | MIDEC applicage output for get up triple streaming 2Fins @ 1000p migro SD card slat  |
| NEW                |              | MJPEG, analogue output for set up, triple streaming, 25ips @ 1080p, micro SD card slot   |
| NEW                |              | for local recording, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, motion   |
| NEW                |              |  |
| NEW .              |              | for local recording, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, motion   |
| NEW .              |              | for local recording, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, motion detection, privacy zones, ROI analytics, alarm in/out, audio in/out, RAL7035 (cool grey)  |
| VK2-1080VRDIR3V9F  | 0474600      | for local recording, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, motion detection, privacy zones, ROI analytics, alarm in/out, audio in/out, RAL7035 (cool grey) housing, clear bubble, 5W (420mA) @ 12VDC, 5.5W (230mA) @ 24VAC, 5.2W @ PoE, |

software included

# KEY FEATURES - VK2-1080VRD

### TRIPLE STREAMING FULL HD (1080P) RESOLUTION

Full HD resolution of 1080p allows for high Definition 16:9 images to be recorded

ONVIF compliance allows seamless integration to third party devices

Using the latest PoE technology, cameras can be powered via the network cable without the need for local PSUs - greatly simplifying any installation

### IN-BUILT IR LEDS (VK2-1080VRDIR3V9F)

The IR illuminators guarantee usable images 24/7 at a range of up to 10m

### REMOTE FOCUS AND ZOOM (VK2-1080VRDIR3V9F)

Enables the operator to remotely adjust the angle of view and cameras focus to achieve the best possible picture.

Recording can be controlled manually or triggered via alarm input, with images streamed in H.264, MPEG4 and MJPEG formats up to 25 images per second

Images can be recorded locally (edge recording) via an on-board micro SD card slot, triggered via onboard VMD or external triggers (SD card not included)

Proven Vista vandal resistant design means the VK2-1080VRD3V9 can be deployed in a variety of applications



25ips @ 1080p, micro SD card slot for local recording, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, motion detection, privacy zones, ROI analytics, alarm in/out, audio in/out, 24 LEDs, up to 10m range, RAL7035 (cool grey) housing, clear bubble, 5W (420mA) @ 12VDC, 5.5W (230mA) @ 24VAC, 5.2W @ PoE, 154x120mm, IP66 (IK10),

VK2-1080VRD3V9 (0474620)



VK2-1080VRDIR3V9F (0474600)



# **FIXED DOMES - VANDAL RESISTANT**

| TRUE DAY NIGHT    | RESOLUTION                      | SENSITIVITY (LUX) | SENSE UP | LENS (mm) | MOTORISED REMOTE FOCUS/ZOOM | ANALOGUE OUTPUT | STREAMING | sdi              | ON-BOARD RECORDING | 3-AXIS | SERVICE JACK | DWDR/ATR | BLC | PWI | MOT DEC | PRIV ZONES | ANALYTICS | ALARM & AUDIO IN/OUT | NO OF IR LED's | IR DISTANCE (m) | HOUSING COLOUR            | BUBBLE COLOUR | VOLTAGE        | IP RATING    |
|-------------------|---------------------------------|-------------------|----------|-----------|-----------------------------|-----------------|-----------|------------------|--------------------|--------|--------------|----------|-----|-----|---------|------------|-----------|----------------------|----------------|-----------------|---------------------------|---------------|----------------|--------------|
| VK2-540VRD        | D1 (720x576)<br>4:3             | 0.25/0.01         | •        | 3-9       |                             | •               | Dual      | 25ips @ D1       |                    | •      |              | •        | •   | •   | •       | •          |           | •                    |                |                 | RAL7035<br>(cool<br>grey) | Clear         | PoE/<br>12/24V | IP66<br>IK10 |
| VK2-1080VRD3V9    | Full HD<br>(1920x1080p)<br>16:9 | 2.5/0.2           |          | 3-9       |                             | •               | Triple    | 25ips @<br>1080p | Micro<br>SD        | •      | •            | •        | •   |     | •       | •          | •         | •                    |                |                 | RAL7035<br>(cool<br>grey) | Clear         | PoE/<br>12/24V | IP66<br>IK10 |
| TRUE DAY NIGHT LE | TRUE DAY NIGHT LED              |                   |          |           |                             |                 |           |                  |                    |        |              |          |     |     |         |            |           |                      |                |                 |                           |               |                |              |
| VK2-1080VRDIR3V9F | Full HD<br>(1920x1080p)<br>16:9 | 2.5/0             |          | 3-9       | •                           | •               | Triple    | 25ips @<br>1080p | Micro<br>SD        | •      | •            | •        | •   |     | •       | •          | •         | •                    | 24             | 10              | RAL7035<br>(cool<br>grey) | Clear         | PoE/<br>12/24V | IP66<br>IK10 |

| VVRD/VPL7-SPACER  | 0498380 | Ceiling spacer for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2,    |
|-------------------|---------|--|
|                   |         | RAL7035 (cool grey), 3/4 NPT side conduit hole, 146x38mm                           |
| VVRD-EWMB1        | 0479030 | Wall bracket (low profile) for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ    |
|                   |         | & Eclipse2, RAL7035 (cool grey)  |
| VRD-EWMB          | 0498930 | Wall mount bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &          |
|                   |         | Eclipse2, RAL7035 (cool grey)  |
| VPL-EWMB/PSU      | 0442910 | Wall mount bracket with built-in 24VAC PSU for VVRD, VPL7-WP-SM & VK2-VRD,         |
|                   |         | RAL7035 (cool grey)  |
| VDM-ECMA          | 0457230 | Corner mount adaptor for wall mount brackets, RAL7035 (cool grey)                  |
| VDM-EPMAg         | 0457240 | Pole mount adaptor for wall mount brackets, requires jubilee clips (not included), |
|                   |         | RAL7035 (cool grey)  |
| VRD-EPMB          | 0498940 | Pendant mount bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &       |
|                   |         | Eclipse2, RAL7035 (cool grey)  |
| VDM-IPMCA         | 0276270 | Pole mount ceiling adaptor, RAL7035 (cool grey)                                    |
| VDM-IPMGA         | 0291100 | Pole mount girder adaptor, RAL7035 (cool grey)                                     |
| VDM-2MP           | 0276240 | 2m pole can be cut to size, RAL7035 (cool grey)                                    |
| VDM-C             | 0276250 | Coupler to join 2 x VDM-2MP together   |
| VPL-IPMA          | 0291180 | Pole mount adaptor for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &          |
|                   |         | Eclipse2, requires VDM-2MP and either VDM-IPMCA or VDM-IPMGA, RAL7035 (cool        |
|                   |         | grey)  |
| VRD-TM            | 0498950 | Tower mount swan neck bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-       |
|                   |         | 600PTZ & Eclipse2, RAL7035 (cool grey)   |
|                   |         |  |
| ACCESSORIES & SPA | RES     |  |
| VK2-LCT           | 0498270 | VK2 Local Commissioning Tool compatible with VK2-1080VFD, VK2-1080BIR37, VK2-      |
|                   |         | 1080BIR3V9F, VK2-1080VRD3V9 & VK2-1080VRDIR3V9F                                    |
| VPL-B-CLR         | 0478590 | Spare clear bubble for VVRD650, VPL7-WP-SM, VPL7-WP-PM, VK2-VRD & VK2-600PTZ,      |
|                   |         | RAL7035 (cool grey) trim   |
| VPL-B-SMO         | 0479590 | Spare smoked bubble for VVRD650, VPL7-WP-SM, VPL7-WP-PM, VK2-VRD &                 |

VK2-600PTZ, RAL7035 (cool grey) trim



# **FULLY FUNCTIONAL DOMES - VANDAL RESISTANT**

## **FULLY FUNCTIONAL - VANDAL RESISTANT**

VK2-600PTZ

0473230

True Day Night, 1/4", D1 (720x576) 4:3, 0.5/0.0 lux (0.001 slow shutter), sense-up, 22x optical zoom, H.264/MJPEG, analogue output, dual encoding, 25ips @ D1, OSD, DWDR, AGC, BLC, motion detection, privacy zones, alarm in/out, audio in/out, RAL7035 (cool grey) housing, clear bubble, 12W (1.2A), 12VDC, 154x140mm, IP66 (IK10), software included





**EAST TO NAVIGATE SETUP MENUS** 



VKS-600PTZ (0473230)

### **KEY FEATURES - VK2-600PTZ**

# ONVIF COMPLIANCE

Affords easy integration to 3rd party systems

### D1 TRANSMISSION

Full D1 25 images per second transmission

### **DUAL IP VIDEO STREAMS**

Dual configurable IP video streams allow more than one user to view camera images at the same time

True Day/Night operation means excellent low light performance

A true hybrid design allows the VK2-600PTZ to be used in standard CCTV systems and IP networks



# **FULLY FUNCTIONAL DOMES - VANDAL RESISTANT**

# FULLY FUNCTIONAL

| I OLLI I ONCTIONA | ₹L                |  |
|-------------------|-------------------|--|
| VK2-1080PTZ       | 0498710           | True Day Night, 1/2.8", Full HD (1920x1080p) 16:9, 1.7/0.26 lux, 20x optical zoom,         |
| NEW               |                   | H.264/MJPEG, analogue output for set up, quad streaming, 25ips @ 1080p, micro SD           |
|                   |                   | card slot for local recording, OSD, DWDR, AGC, FNR, BLC, ROI, motion detection,            |
|                   |                   | privacy zones, 2 alarm in & 1 out, audio in/out, black housing, clear bubble, 13.2W (1.1A) |
|                   |                   | @ 12VDC, 13.8W (0.93A) @ 24VAC, 13.8W (0.28A) @ PoE, 208x125mm, software                   |
|                   |                   | included   |
| VK2-1080PTZICM NI | <b>EW</b> 0498730 | Internal false ceiling mounting for VK2-1080PTZ  |
| VK2-1080PTZHSG    | 0498720           | External housing with clear bubble for VK2-1080PTZ, includes heater, 53W (2.21A),          |
| NEW               |                   | 24VAC, IP66 (IK10)   |



VK2-1080PTZ (0498710)



VK2-1080PTZHSG (0498720)EXTERNAL HOUSING (NO CAMERA MODULE)

# KEY FEATURES - VK2-1080PTZ

### FULL HD 1080p IMAGERY

Megapixel technology affords large scene coverage and ultimate detail for retrospective review

### 20:1 ZOOM LENS WITH CONTINUOUS ROTATION PTZ CONTROL

Allows the operator to cover a large area whilst still maintaining excellent picture quality

Using the latest PoE technology, cameras can be powered via the network without the need for local fused spurs to be installed greatly simplifying any installation

### **ONVIF COMPLIANT**

ONVIF compliance allows seamless integration to third party devices.

# TRUE DAY/NIGHT OPERATION

With the inclusion of a removable IR cut filter the camera guarantees crisp images 24/7

### RECORDING FLEXIBILITY

Recording onto the internal SD card can be controlled manually or triggered via alarm input or motion detection, with images streamed in both H.264 and MPEG 4 formats at up to 25ips @1920x1080

### FNVIRONMENTAL

When used with the optional VK2-1080PTZHSG the dome is weatherproof to IP66 and vandal resistant to IK10



# **FULLY FUNCTIONAL DOMES - VANDAL RESISTANT**

|                           | VK2-600PTZ                      | VK2-1080PTZ                                    |
|---------------------------|---------------------------------|--|
| Resolution                | D1 (520x576) 4:3                | Full HD (1920x1080p) 16:9                      |
| Sensitivity               | 0.5/0.01/0.001 lux              | 1.7/0.26                                       |
| Optical Zoom              | 22:1                            | 20:1   |
| Digital Zoom              | x16                             | x12  |
| Focal Length              | 3.9-85.8mm                      | 4.7-94mm                                       |
| WDR                       | Yes                             | Yes  |
| Max Pan/Tilt Speed        | 0.1 -380°/s                     | 0.1 -380°/s                                    |
| Pan Angle                 | 0-360°                          | 0-360°   |
| Presets                   | 120 with titles                 | 160 with titles                                |
| Preset Tours              | 4 with titles                   | 8 with titles                                  |
| Learn Tours               | 4 with titles                   | 4 with titles                                  |
| Areas                     | 8 with titles                   | 4 with titles                                  |
| Privacy Zones             | 4                               | 12 with titles                                 |
| Motion Detection (Preset) | Yes                             | Yes  |
| AutoPan/Scan              | 1 autopan & 4 autoscans         | 4 autoscans                                    |
| Home Position             | Preset, Preset Tour or AutoScan | Preset, Preset Tour or AutoScan                |
| Alarm Inputs              | 1                               | 2  |
| Alarm Outputs             | 1                               | 1  |
| Audio Inputs              | 1                               | 1  |
| Audio Outputs             | 1                               | 1  |
| Analogue Output           | Yes                             | Yes  |
| Streaming                 | Dual                            | Quad   |
| ips                       | 25 @ D1                         | 25 @ Full HD                                   |
| Local Recording           | No                              | Micro SD card                                  |
| Housing Colour            | RAL7035                         | Black. External housing is RAL7035 (cool grey) |
| Internal/External         | Yes                             | Yes with optional VK2-1080PTZHSG               |
| Lower Bubble              | Clear                           | Clear  |
| Current Consumption       | 12W                             | 13.8W. External housing is 53W                 |
| Voltage                   | 12VDC                           | PoE/12/24VAC. External housing is 24VAC        |
| IP Rating                 | IP66                            | IP66 with optional VK2-1080PTZHSG              |
| Vandal Resistance         | IK10                            | IK10 with optional VK2-1080PTZHSG              |



# **FULLY FUNCTIONAL DOMES - VANDAL RESISTANT**

| BRACKETS          |         |  |
|-------------------|---------|--|
| VVRD/VPL7-SPACER  | 0498380 | Ceiling spacer for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2,    |
|                   |         | RAL7035 (cool grey), 3/4 NPT side conduit hole, 146x38mm                           |
| VVRD-EWMB1        | 0479030 | Wall bracket (low profile) for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ    |
|                   |         | & Eclipse2, RAL7035 (cool grey)  |
| VRD-EWMB          | 0498930 | Wall mount bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &          |
|                   |         | Eclipse2, RAL7035 (cool grey)  |
| VPL-EWMBe         | 0498960 | Wall mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, RAL7035 (cool grey)       |
| VDM-ECMA          | 0457230 | Corner mount adaptor for wall mount brackets, RAL7035 (cool grey)                  |
| VDM-EPMAg         | 0457240 | Pole mount adaptor for wall mount brackets, requires jubilee clips (not included), |
|                   |         | RAL7035 (cool grey)  |
| VRD-EPMB          | 0498940 | Pendant mount bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &       |
|                   |         | Eclipse2, RAL7035 (cool grey)  |
| VPP-IPMB250       | 0472170 | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 250mm, RAL7035         |
|                   |         | (cool grey)  |
| VPP-IPMB500       | 0472180 | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 500mm, RAL7035         |
|                   |         | (cool grey)  |
| VPP-IPMB1000      | 0472190 | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 1000mm, RAL7035        |
|                   |         | (cool grey)  |
| VPP-IPMB2000      | 0472200 | Pendant mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, 2000mm,                |
|                   |         | RAL7035 (cool grey)  |
| VDM-IPMCA         | 0276270 | Pole mount ceiling adaptor, RAL7035 (cool grey)                                    |
| VDM-IPMGA         | 0291100 | Pole mount girder adaptor, RAL7035 (cool grey)                                     |
| VDM-2MP           | 0276240 | 2m pole can be cut to size, RAL7035 (cool grey)                                    |
| VDM-C             | 0276250 | Coupler to join 2 x VDM-2MP together   |
| VPL-IPMA          | 0291180 | Pole mount adaptor for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ &          |
|                   |         | Eclipse2, requires VDM-2MP and either VDM-IPMCA or VDM-IPMGA, RAL7035              |
|                   |         | (cool grey)  |
| VPP-IPMA          | 0472160 | Pole mount adaptor for VPL7-WP-PM, VPP & VK2-1080PTZHSG, requires VDM-2MP and      |
|                   |         | either VDM-IPMCA or VDM-IPMGA, RAL7035 (cool grey)                                 |
| VRD-TM            | 0498950 | Tower mount swan neck bracket for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-       |
|                   |         | 600PTZ & Eclipse2, RAL7035 (cool grey)   |
| VPP-TM            | 0470440 | Tower mount swan neck bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, RAL7035        |
|                   |         | (cool grey)  |
| VPP-ESMB          | 0452090 | Swing arm mount bracket for VPL7-WP-PM, VPP & VK2-1080PTZHSG, RAL7035 (cool        |
|                   |         | grey)  |
|                   |         |  |
| ACCESSORIES & SPA |         |  |
| VPL-B-CLR         | 0478590 | Spare clear bubble for VVRD650, VPL7-WP-SM, VPL7-WP-PM, VK2-VRD & VK2-600PTZ       |
|                   |         | RAL7035 (cool grey) trim   |
| VPL-B-SMO         | 0479590 | Spare smoked bubble for VVRD650, VPL7-WP-SM, VPL7-WP-PM, VK2-VRD &                 |
|                   |         | VK2-600PTZ, RAL7035 (cool grey) trim   |





# **HOUSINGS**

| 1101 | LOIL |         | NITEDALAL |  |
|------|------|---------|-----------|--|
| HOU  | JSIN | 165 - I | INTERNAL  |  |

| VHI-11          | 0356950 | MCL-270x80x70mm, Internal housing c/w bracket, RAL7035 (cool grey)            |
|-----------------|---------|---|
| HOUSINGS - EXTE | RNAL    |   |
| VHE-23HV        | 0356960 | MCL-260x90x85mm, fully cable managed bracket, sunshield, RAL7035 (cool grey), |
|                 |         | 22W (95mA), 230VAC, IP66  |
| VHE-23HV/FC     | 0445210 | MCL-260x90x85mm, fully cable managed bracket, sunshield, RAL7035 (cool grey), |
|                 |         | 22W (95mA), 230VAC, IP55  |
| VHE-23LV        | 0356970 | MCL-260x90x85mm, fully cable managed bracket, sunshield, RAL7035 (cool grey), |
|                 |         | 14W (600mA), 24VAC, IP66  |
| VHE-23LV/FC     | 0470430 | MCL-260x90x85mm, fully cable managed bracket, sunshield, RAL7035 (cool grey), |
|                 |         | 14W (600mA), 24VAC, IP55  |
| VCMH24A         | 0498410 | MCL-250x105x86mm, fully cable managed bracket, flat sided sunshield, RAL7035  |
|                 |         | (cool grey), 20W (850mA), 24VAC, IP66   |
| VCMHA           | 0498400 | MCL-250x105x86mm, fully cable managed bracket, flat sided sunshield, RAL7035  |
|                 |         | (cool grey), 40W (170mA), 230VAC, IP66  |
|                 |         |   |

## **BRACKETS**

| VHE-EPMA1   | 0032830 | External pole mount adapter for 1 x VCMH, 50-140mm pole diameter, black       |
|-------------|---------|---|
| VHE-EPMA2   | 0032700 | External pole mount adapter for up to 2 x VCMH, 50-140mm pole diameter, black |
| VHE-23-EPMA | 0442920 | External pole mount adapter for 2 x VHE-23, RAL7035 (cool grey)               |

# **ACCESSORIES & SPARES**

| HT6/LV         | 0342560 | 12VDC/24VAC heater assembly for VCMH |
|----------------|---------|--------------------------------------|
| HT6/MAINS      | 0342580 | 240VAC heater assembly for VCMH      |
| VHE-23-HTRLV   | 0444620 | 24VAC heater assembly for VHE-23     |
| VHE-23-HTRHV   | 0444630 | 230VAC heater assembly for VHE-23    |
| VHE-23-S/PLATE | 0495660 | Spreader plate for VHE-23            |
| VA6            | 0088540 | Laminated glass for VCMH, 5mm thick  |

# **KEY FEATURES - VHE-23**

### SIDE OPENING HOUSING

The housing opens fully at the side and hangs down to give free access to the camera and all connections for quick and easy installation and servicing

### IP66 RATED HOUSING

This high level of weatherproofing means that the housing is dust tight and protected against high pressure jets of water

### FLAT BASE

The flat, open plan base provides total access to all internal connections. The camera mounting platform is also raised to assist with lens focusing

### THREE SEPARATE CABLE GLANDS

Having three separate glands allows the installer to split the connecting cables between the glands, thus ensuring a perfect seal for each cable

# FULLY CABLE-MANAGED BRACKET

This provides maximum protection for all cables entering the housing, increasing the integrity of the housing and providing a more professional installation



**VHE-23** 



# PERIMETER PROTECTION

| VID-W03L040         0404390         3m x 40m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W03L100         0404400         3m x 100m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W10L040         0404370         10m x 40m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W20L030         0404420         20m x 30m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W22L050         0479460         22m x 50m, white, 5W, 12VDC/24VAC, 245x98x105mm           BRACKETS           VID-PA         0404450         Pole mount adapter | WALK TESTER     | 711120  | Please contact Norbain for more information     |
|---|-----------------|---------|---|
| VID-W03L100         0404400         3m x 100m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W10L040         0404370         10m x 40m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W20L030         0404420         20m x 30m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W22L050         0479460         22m x 50m, white, 5W, 12VDC/24VAC, 245x98x105mm           BRACKETS  | ACCESSORIES & S | PARES   |   |
| VID-W03L100         0404400         3m x 100m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W10L040         0404370         10m x 40m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W20L030         0404420         20m x 30m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W22L050         0479460         22m x 50m, white, 5W, 12VDC/24VAC, 245x98x105mm   | VID-PA          | 0404450 | Pole mount adapter                              |
| VID-W03L100         0404400         3m x 100m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W10L040         0404370         10m x 40m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W20L030         0404420         20m x 30m, white, 5W, 12VDC/24VAC, 245x98x105mm   | BRACKETS        |         |   |
| VID-W03L100         0404400         3m x 100m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W10L040         0404370         10m x 40m, white, 5W, 12VDC/24VAC, 245x98x105mm           VID-W20L030         0404420         20m x 30m, white, 5W, 12VDC/24VAC, 245x98x105mm   | VID-W22L050     | 0479460 | 22m x 50m, white, 5W, 12VDC/24VAC, 245x98x105mm |
| VID-W03L100 0404400 3m x 100m, white, 5W, 12VDC/24VAC, 245x98x105mm   | VID-W20L030     | 0404420 |   |
|   | VID-W10L040     | 0404370 | 10m x 40m, white, 5W, 12VDC/24VAC, 245x98x105mm |
| VID-W03L040 0404390 3m x 40m, white, 5W, 12VDC/24VAC, 245x98x105mm  | VID-W03L100     | 0404400 | 3m x 100m, white, 5W, 12VDC/24VAC, 245x98x105mm |
|   | VID-W03L040     | 0404390 | 3m x 40m, white, 5W, 12VDC/24VAC, 245x98x105mm  |

# **KEY FEATURES - VID DETECTORS**

# ADAPTIVE THRESHOLD DISCRIMINATION

Reduces the number of nuisance alarms by constantly averaging and adjusting the threshold

# DOUBLE CURTAIN COVERAGE

Deferential sensors eliminate unwanted alarms by rejecting any signal received simultaneously by the two curtains

# STAND-ALONE PASSIVE IR DETECTOR

Provides cheaper and simpler installation and alignment

# INTERNAL TEMPERATURE COMPENSATION

This prevents condensation and ensures reliable operation under extreme weather conditions

# COMPUTER DESIGNED OPTICAL SYSTEM

Provides excellent uniformity in coverage over the full detection



**VID DETECTOR** 



# **IR LIGHTING**

| VIR-ZM1       |          |  |
|---------------|----------|--|
| VIR-ZM1       | 0479640  | 2-90°, 18-100m, 850nm, built-in photocell, black, 3.5W (350mA), requires PSU,      |
| NEW           |          | 72x128x94mm, IP66  |
| VIRSY2 SERIES |          |  |
| VIRSY2-S      | 0479680  | 10-75°, 20-60m, 850nm, built-in photocell with following contact for TDN cameras,  |
| NEW           |          | power output pot, black, 11W (900mA), requires PSU, 75x100x54mm, IP66              |
| VIRSY2-M      | 0479690  | 10-75°, 30-110m, 850nm, built-in photocell with following contact for TDN cameras, |
| NEW           |          | power output pot, black, 25W (2.5A), requires PSU, 13x100x65mm, IP66               |
| VIRSY2-L      | 0479700  | 10-75°, 45-200m, 850nm, built-in photocell with following contact for TDN cameras, |
| NEW           |          | power output pot, black, 35W (3A), requires PSU, 180x135x65mm, IP66                |
|               |          |  |
| BRACKETS      |          |  |
| VIRBWM        | 0495840  | Wall brkt for VIR LED range  |
| VIRBPTZ       | 0495860  | Dual lamp PTZ brkt for VIR LED   |
| VIRB180       | 0495870  | Side pole brkt for VIR LED   |
| VIRB360       | 0495880  | Dual pole brkt for VIR LED   |
| VIRBSPM       | 0495890  | Quad pole brkt for VIR LED   |
| ACCESSORIES & | SDADES   |  |
| VIR300PC      | 0337710  | Photocell c/w day/night switch for use with VIR300WF/WS, VIR50W and VIRLED IR      |
| VINJUUPC      | 0331110  | lamps. IP66  |
| VDCLIDDEVT    | 0.406100 | to prove the   |
| VPSU122EXT    | 0496100  | PSU for VIR-ZM1 & VIRSY2-S, 12VDC, 2A regulated, ABS, 158x89x78mm, IP66            |
| VPSU1241      | 0471520  | PSU for VIRSY2-M & L models, 12VDC, 4A regulated, ABS, 187.2x122x90mm, IP66        |
| VPSU243EXT    | 0496080  | PSU for all VIR models, 24VAC, 3A, ABS, 158x89x78mm, IP66                          |

# KEY FEATURES - VIR-ZM1

MANUALLY ADJUSTABLE IR ILLUMINATION Adjustment between 2 and 90

LOW RUNNING COSTS

Requires only 3.5W to operate

BUILT-IN PHOTOCELL

The photocell automatically turns the illuminator on when it gets dark

12VDC AND 24VAC OPERATION

Will operate on many different PSUs

SUPPLIED WITH WALL MOUNT BRACKET
A simple to install and adjust bracket makes it very easy to install



# IR LIGHTING

| ZM1     | ANGLE (H) DEGREES | RANGE (M) | WIDTH AT MAXIMUM RANGE (APPROX) | PHOTOCELL ADJUSTABLE | OUTPUT POWER ADJUSTABLE | OUTPUT CONTACT TO SWITCH DN CAMERA | INPUT CONTACT TO POWER THE IR ON/OFF | IP RATING |
|---------|-------------------|-----------|---------------------------------|----------------------|-------------------------|------------------------------------|--------------------------------------|-----------|
| VID 7M  | 2.000             | 100m @ 2° | 4                               | No                   | No                      | No                                 | No                                   | IDCC      |
| VIR-ZM1 | 2-90°             | 18m @ 90° | 28                              | No                   | No                      | No                                 | No                                   | IP66      |
|         |                   |           |                                 |                      |                         |                                    |                                      |           |



|          |           | 60m @ 10°  | 11 |     |     |     |     |      |
|----------|-----------|------------|----|-----|-----|-----|-----|------|
| VIRSY2-S | 10/30/75° | 40m @ 30°  | 24 | Yes | Yes | Yes | Yes | IP66 |
|          |           | 20m @ 75°  | 35 |     |     |     |     |      |
|          |           | 110m @ 10° | 20 |     |     |     |     |      |
| VIRSY2-M | 10/30/75° | 60m @ 30°  | 35 | Yes | Yes | Yes | Yes | IP66 |
|          |           | 30m @ 75°  | 50 |     |     |     |     |      |
|          |           | 200m @ 10° | 36 |     |     |     |     |      |
| VIRSY2-L | 10/30/75° | 110m @ 30° | 60 | Yes | Yes | Yes | Yes | IP66 |
|          |           | 45m @ 75°  | 75 |     |     |     |     |      |



VIRSY2-S (0479680)



VIRSY2-M (0479690)

# KEY FEATURES - VIRSY2

# INTERCHANGEABLE LENS OPTIONS

These allow the installer to match the beam angle to the cameras field of view

# EVEN ILLUMINATION

Evenly spread lighting means that hot spots are avoided

# 12VDC - 24VAC OPERATION

Gives flexibility to the installer to use the power supply of their choice

# IN-BUILT ADJUSTABLE PHOTOCELL

The installer can adjust the level at which the illuminators switch on and off

### PHOTOCELL FOLLOWING CONTACT

The illuminator can be integrated with a Day/Night camera to control the point at which the camera switches from colour to monochrome operation

# ILLUMINATES DISTANCES UP TO 200M

The three products within the range give the installer a wide variety of illumination angles and ranges ideal for perimeter coverage



VIRSY2-L (0479700)



# **QUADS**

### **QUADS**

| VQCM4 | 0310570 | Quad, real-time, motion detection, alarm inputs, black, 12W, 12VDC PSU included, |
|-------|---------|--|
|       |         | 320x150x60mm   |

## **KEY FEATURES - VQCM4**

#### ACCEPTS BOTH COLOUR AND MONOCHROME CAMERAS & EITHER PAL OR NTSC SIGNALS

This unique ability amongst quads gives both correct colour and monochrome images, this includes true day/hight cameras, unlike some DVRs that try to give monochrome images colour as they are looking for the "Colour Burst". Both PAL or NTSC cameras are useable, resulting in customers not have to worry about stocking too many products lines

### **EXCEPTIONALLY FAST RESPONSE TIME**

This high refresh rate means that the operator sees "Real-Time" images

### SEPARATE VCR AND MONITOR OUTPUTS

The separate outputs for both the monitor and VCR is highly effective allowing the operator to view a Single, Sequential, PIP or Quad images while recording the required quad images, unlike most of the quads on the market, that record what you view

### MOTION DETECTION

Unlike most quads the VQCM4 has a per camera built-in motion detection that can trigger control equipment or a DVR to record as if in alarm mode



VQCM4

(0310570)



# **SWITCHERS & KEYBOARDS**

| DESKTOP     |         |   |
|-------------|---------|---|
| VS042       | 0315850 | Switcher, 4 way 2 monitor, cream, 4.5W, 15VAC PSU included, 210x48x195mm          |
| VSO42A      | 0315860 | Switcher, 4 way 2 monitor with alarms, cream, 4.5W, 15VAC PSU included,           |
|             |         | 210x48x195mm  |
| VS082       | 0315870 | Switcher, 8 way 2 monitor, cream, 4.5W, 15VAC PSU included, 210x48x195mm          |
| VS082A      | 0315880 | Switcher, 8 way 2 monitor with alarms, cream, 4.5W, 15VAC PSU included,           |
|             |         | 210x48x195mm  |
|             |         |   |
| KEYBOARDS   |         |   |
| VKBD1       | 0446190 | Stand alone dome control keyboard, RS485, black, 3W, 9VDC PP3 battery or 12VDC,   |
|             |         | 280x174x92mm, PSU included  |
| VKBD4       | 0363570 | Dome, DVR & VM8 matrix control keyboard, RS485, LED display, black, 6W, 9-12VDC   |
|             |         | 368x205x113mm, PSU included   |
|             |         |   |
| ACCESSORIES |         |   |
| VKBDRKIT    | 0443320 | Remote kit for VKBD4 keyboard, allow installation greater than 2m from controller |
| VSD/16      | 0349850 | 16 Channel dome protocol star driver, RS422/RS485, controller, black, 10W, 12VDC, |
|             |         | requires PSU, 44x492x14.3mm   |

# **KEY FEATURES - VKBD4**

# SYSTEM STATUS LCD

2.8" LCD gives clear indication of system status, mode of operation, and multi-function soft keys

# TRI-STATE BACKLIT CONTROL KEYS

Tri-state, colour-coded keys automatically change functionality depending on keyboard mode. Indicated via change of colour

### 2 X RS422/RS485 OUTPUTS

Each output permits a different control protocol to be selected simultaneously

### 3-AXIS JOYSTICK

Precise control of P/T/Z functions and scroll through Menu options

### QUICK SHORTCUT KEYS

Easy to programme and control Dome Presets and Tours

# ENGINEER SET-UP MODE

Simple set-up via display on LCD

User-friendly and comfortable operation the housing opens fully at the side and hangs down to give free access to the camera and all connections for quick and easy installation and servicing





# **QUANTUM**EVO

#### **EVO**

| Q4-320h     | 0470470 | 4 channel, H.264, non DVD, 100ips @ CIF, 320GB, RS485 telemetry, black, 36W (3A),    |
|-------------|---------|--|
|             |         | 12VDC, 355x245x60mm  |
| QE04-500hf  | 0657130 | 4 channel, H.264, DVD, 100ips @ CIF, 500GB, RS485 or coax telemetry, black, 60W      |
|             |         | (5A), 12VDC, 450x370x90mm  |
| QE08-500hf  | 0657140 | 8 channel, H.264, DVD, 100ips @ CIF, 500GB, RS485 or coax telemetry, black, 60W      |
|             |         | (5A), 12VDC, 450x370x90mm  |
| QE08-1000hf | 0498300 | 8 channel, H.264, DVD, 100ips @ CIF, 1TB, RS485 or coax telemetry, black, 60W (5A),  |
|             |         | 12VDC, 450x370x90mm  |
| QE16-500hf  | 0657150 | 16 channel, H.264, DVD, 100ips @ CIF, 500GB, RS485 or coax telemetry, black,60W      |
|             |         | (5A), 12VDC, 450x370x90mm  |
| QE16-1000hf | 0472570 | 16 channel, H.264, DVD, 100ips @ CIF, 1TB, RS485 or coax telemetry, black, 60W (5A), |
|             |         | 12VDC, 450x370x90mm  |
| QE16-2000hf | 0473200 | 16 channel, H.264, DVD, 100ips @ CIF, 2TB, RS485 or coax telemetry, black, 60W (5A), |
|             |         | 12VDC, 450x370x90mm  |
|             |         |  |

## KEY FEATURES - QUANTUM EVO

Extremely efficient H.264 compression provides economical storage of high quality images, with the option of recording speeds in 100ips @ CIF, 50ips @ 2CIF or 25ips @ D1

# VISTA VKBD4 REMOTE KEYBOARD CONTROL

Full and intuitive remote control of any DVR and connected dome cameras can be achieved by adding the Vista VKBD4 remote keyboard

# COMPREHENSIVE CONTROL

Basic PTZ control via each unit's front panel, or mouse, allows easy and simple end-user control of fully functional cameras via multiprotocol RS485 telemetry

### **FASY OPERATION**

An Intuitive Graphical User Interface (GUI ) ensures simple mouse driven setup and installation, and utilises the same familiar features and layout as the popular Quantum Plus range

## COST-EFFECTIVE, HIGH-PERFORMANCE

The Quantum EVO H264 DVR range delivers excellent recorded picture quality versus other higher specification units in the market place

# RECORDING OPTIONS

Available in 4, 8, or 16-channel variants, and with reliable SATA hard drive capacity from 320GB to 2TB, the Quantum EVO H264 DVR range includes a model to suit all applications

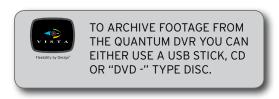


# QUANTUMEVO 4 CHANNEL NO DVD





## QUANTUMEVO 16 CHANNEL WITH DVD





# **QUANTUM**EVO

### QUANTUMEVO MENU STRUCTURE



The Quantum<sup>Evo</sup> on-board menu structure is both intuitive and easy to use. With the simply laid out screen icons and menus, all aspects of programming the DVR can be carried out in minutes. The Tab based menus are split into categories for quick access to the relevant field you require. The DVR menus can be accessed and programmed via the front panel of the DVR, mouse control, keyboard control (if fitted) and remote viewing software if connected to a network.

## QUANTUMEVO REMOTE VIEWING SOFTWARE



If the Quantum<sup>Evo</sup> is connected to a network the remote viewing software is both intuitive and easy to use. In Live mode with the simply laid out screen icons you can select to view various screen layouts, whether it be only a single camera or a multi-screen of cameras. Control of PTZ cameras or domes is also accessible. If audio is connected the sound can be monitored remotely and 2 way audio can be achieved. In Playback mode search along with archiving and saving an image make this software a total remote solution to accessing your networked Quantum<sup>Evo</sup> units. Remote access to the Quantum<sup>Evo</sup> set up menus is available if you have permitted access rights.



**Q REMOTE APP** 









# QUANTUMPLUS 960H



## **PLUS 960H**

| FE03 90011            |         |  |
|-----------------------|---------|--|
| QP960H04-1TB          | 0656440 | 4 channel, H.264, DVD, 400ips @ 960H, 1TB, RS485 or coax telemetry, black, 90W   |
| NEW ttp               |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP960H04-2TB          | 0656450 | 4 channel, H.264, DVD, 400ips @ 960H, 2TB, RS485 or coax telemetry, black, 90W   |
| NEW 🖽                 |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP960H08-1TB          | 0656790 | 8 channel, H.264, DVD, 400ips @ 960H, 1TB, RS485 or coax telemetry, black, 90W   |
| NEW 🔛                 |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP960H08-2TB          | 0656460 | 8 channel, H.264, DVD, 400ips @ 960H, 2TB, RS485 or coax telemetry, black, 90W   |
| NEW LD                |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP960H08-4TB          | 0656470 | 8 channel, H.264, DVD, 400ips @ 960H, 4TB, RS485 or coax telemetry, black, 90W   |
| NEW III               |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP960H08-6TB          | 0656480 | 8 channel, H.264, DVD, 400ips @ 960H, 6TB, RS485 or coax telemetry, black, 90W   |
| NEW ttp               |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP960H16-1TB          | 0656490 | 16 channel, H.264, DVD, 400ips @ 960H, 1TB, RS485 or coax telemetry, black, 90W  |
| NEW ttp               |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP96 <u>0</u> H16-2TB | 0658290 | 16 channel, H.264, DVD, 400ips @ 960H, 2TB, RS485 or coax telemetry, black, 90W  |
| NEW III               |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP96 <u>0</u> H16-4TB | 0658300 | 16 channel, H.264, DVD, 400ips @ 960H, 4TB, RS485 or coax telemetry, black, 90W  |
| NEW III               |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP96 <u>0</u> H16-6TB | 0656510 | 16 channel, H.264, DVD, 400ips @ 960H, 6TB, RS485 or coax telemetry, black, 90W  |
| NEW W                 |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP96 <u>0</u> H16-8TB | 0656520 | 16 channel, H.264, DVD, 400ips @ 960H, 8TB, RS485 or coax telemetry, black, 90W  |
| NEW 🔛                 |         | (390mA), 100-240VAC, 440x420x90mm  |
| QP960H16-12TB         | 0656530 | 16 channel, H.264, DVD, 400ips @ 960H, 12TB, RS485 or coax telemetry, black, 90W |
| NEW HD                |         | (390mA), 100-240VAC, 440x420x90mm  |
|                       |         |  |





# QUANTUMPLUS 16 CHANNEL WITH DVD

# KEY FEATURES - QUANTUMPLUS 960H

This latest recording technology matches the DVR recording system to the cameras to produce an industry leading recording auality

# IPHONE AND ANDROID APPS

These free of charge applications allow remote monitoring of the DVR from mobile handsets

# **REAL TIME 960H RECORDING**

Records 25ips per camera, up to 400ips global recording Note: 960H replay maximum 100ips

### MULTIPLE MONITOR OUTPUTS

HDMI & VGA monitor outputs for excellent picture quality, plus 2 programmable spot outputs give the operator greater viewing flexibility, than other similar specification DVRs

### INTUITIVE SET-UP MENUS

Driven from the front panel, mouse or remote keyboard making it easy for the installer to set-up and the end user to operate

## MULTIPROTOCOL RS485 & COAXIAL TELEMETRY

Allows the DVR's to integrate to the majority of popular camera control systems, Vista, Pelco P and Pelco D RS485 protocols are supplied as standard. Whilst the inclusion of Vista & Pelco coaxial telemetry control allows the control of remote devices via a single coax cable

# UP TO 12TB OF STORAGE ONBOARD THE UNIT

Enough storage to cover the vast majority of applications



# QUANTUMPLUS 960H

### QUANTUMPLUS 960H MENU STRUCTURE





The Quantum<sup>Plus</sup> 960H on-board menu structure is both intuitive and easy to use. With the simply laid out screen icons and menus, all aspects of programming the DVR can be carried out in minutes. The Tab based menus are split into categories for quick access to the relevant field you require. The DVR menus can be accessed and programmed via the front panel of the DVR, mouse control, keyboard control (if fitted) and remote viewing software if connected to a network.

## QUANTUMPLUS 960H REMOTE VIEWING SOFTWARE



If the Quantum<sup>Plus</sup> 960H is connected to a network the remote viewing software is both intuitive and easy to use. In Live mode with the simply laid out screen icons you can select to view various screen layouts, whether it be only a single camera or a multi-screen of cameras. Control of PTZ cameras or domes is also accessible. If audio is connected the sound can be monitored remotely and 2 way audio can be achieved. In Playback mode search along with archiving and saving an image make this software a total remote solution to accessing your networked Quantum<sup>Plus</sup> 960H units. Remote access to the Quantum<sup>Plus</sup> 960H set up menus is available if you have permitted access rights.



**Q\_REMOTE APP** 









# QUANTUMXTRA 960H



## **XTRA 960H**

| QX960H08-1TB           | 0658310 | 8 channel, H.264, DVD, 400ips @ 960H, 1TB, realtime playback across all screen views,  |
|------------------------|---------|--|
| NEW III                |         | RS485 or coax telemetry, e-Sata, black, 90W (390mA), 100-240VAC, 440x420x90mm          |
| QX960H08-2TB           | 0658320 | 8 channel, H.264, DVD, 400ips @ 960H, 2TB, realtime playback across all screen views,  |
| NEW LD                 |         | RS485 or coax telemetry, e-Sata, black, 90W (390mA), 100-240VAC, 440x420x90mm          |
| QX960H08-4TB           | 0658330 | 8 channel, H.264, DVD, 400ips @ 960H, 4TB, realtime playback across all screen views,  |
| NEW W                  |         | RS485 or coax telemetry, e-Sata, black, 90W (390mA), 100-240VAC, 440x420x90mm          |
| QX96 <u>0</u> H08-6TB  | 0656550 | 8 channel, H.264, DVD, 400ips @ 960H, 6TB, realtime playback across all screen views,  |
| NEW W                  |         | RS485 or coax telemetry, e-Sata, black, 90W (390mA), 100-240VAC, 440x420x90mm          |
| QX960H16-1TB           | 0658340 | 16 channel, H.264, DVD, 400ips @ 960H, 1TB, realtime playback across all screen views, |
| NEW HP                 |         | RS485 or coax telemetry, e-Sata, black, 90W (390mA), 100-240VAC, 440x420x90mm          |
| QX96 <u>0</u> H16-2TB  | 0658350 | 16 channel, H.264, DVD, 400ips @ 960H, 2TB, realtime playback across all screen views, |
| NEW HD                 |         | RS485 or coax telemetry, e-Sata, black, 90W (390mA), 100-240VAC, 440x420x90mm          |
| QX96 <u>0</u> H16-4TB  | 0658360 | 16 channel, H.264, DVD, 400ips @ 960H, 4TB, realtime playback across all screen views, |
| NEW HD                 |         | RS485 or coax telemetry, e-Sata, black, 90W (390mA), 100-240VAC, 440x420x90mm          |
| QX96 <u>0</u> H16-6TB  | 0656570 | 16 channel, H.264, DVD, 400ips @ 960H, 6TB, realtime playback across all screen views, |
| NEW 🔛                  |         | RS485 or coax telemetry, e-Sata, black, 90W (390mA), 100-240VAC, 440x420x90mm          |
| QX960H16-8TB           | 0656580 | 16 channel, H.264, DVD, 400ips @ 960H, 8TB, realtime playback across all screen views, |
| NEW HD                 |         | RS485 or coax telemetry, e-Sata, black, 90W (390mA), 100-240VAC, 440x420x90mm          |
| QX96 <u>0</u> H16-12TB | 0656590 | 16 channel, H.264, DVD, 400ips @ 960H, 12TB, realtime playback across all screen       |
| NEW 🔛                  |         | views, RS485 or coax telemetry, e-Sata, black, 90W (390mA), 100-240VAC,                |
|                        |         | 440x420x90mm   |
|                        |         |  |





# QUANTUMXTRA 16 CHANNEL WITH DVD

# KEY FEATURES - QUANTUMXTRA 960H

This latest recording technology matches the DVR recording system to the cameras to produce an industry leading recording

# IPHONE AND ANDROID APPS

These free of charge applications allow remote monitoring of the DVR from mobile handsets

### REAL TIME 960H RECORDING & PLAYBACK

Records 25ips per camera, up to 400ips global recording & review

# MULTIPLE MONITOR OUTPUTS

HDMI & VGA monitor outputs for excellent picture quality, plus 2 programmable spot outputs give the operator greater viewing flexibility, than other similar specification DVRs

# INTUITIVE SET-UP MENUS

Driven from the front panel, mouse or remote keyboard making it easy for the installer to set-up and the end user to operate

### MULTIPROTOCOL RS485 & COAXIAL TELEMETRY

Allows the DVR's to integrate to the majority of popular camera control systems, Vista, Pelco P and Pelco D RS485 protocols are supplied as standard. Whilst the inclusion of Vista & Pelco coaxial telemetry control allows the control of remote devices via a single coax cable

### AUDIO INPUT PER VIDEO INPUT

Allows for audio tracks to be recorded for each camera also used to initiate different recording modes

## UP TO 12TB OF STORAGE ONBOARD THE UNIT

Enough storage to cover the vast majority of applications



# QUANTUMXTRA 960H

### QUANTUMXTRA 960H MENU STRUCTURE





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Q\_REMOTE APP





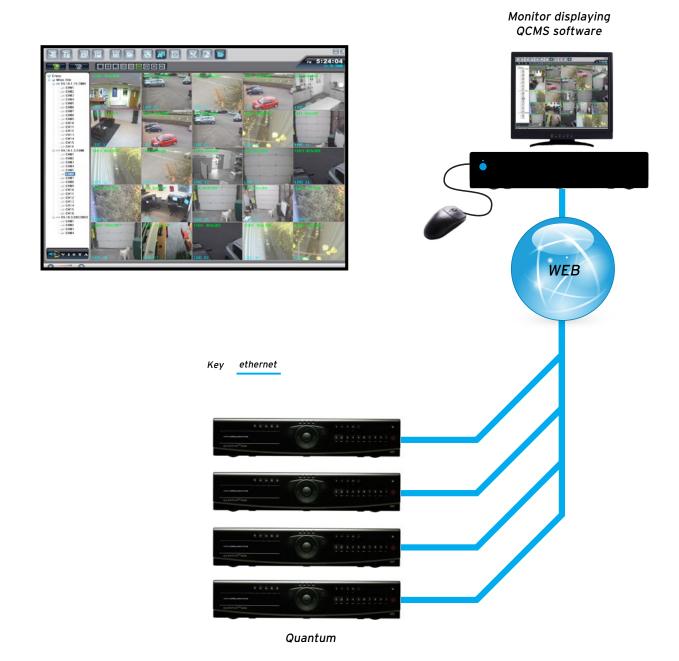




# **QUANTUM MANAGEMENT SOFTWARE - QCMS**

# **REMOTE ACCESS & CENTRAL MANAGEMENT**

To allow the remote control of Quantum range connected to PTZ cameras/domes, a viewing software application is provided, permitting full operation and programming, with multi-user log on and simple address book site reference. This Central Management Software (QCMS) is provided FREE OF CHARGE with the Quantum DVR enabling connection of multiple DVRs & viewing of up to 64 images.





# **QUANTUM RANGE**





|                             | Quantum EVO non DVD   | Quantum EVO DVD                                     | Quantum Plus 960H   | Quantum Xtra 960H                 |  |
|-----------------------------|---|---|---|-----------------------------------|--|
| Video Inputs                | 4   | 4, 8 & 16   | 4, 8 & 16   | 8 or 16                           |  |
| HDMI Output                 | 1   | No  | 1 - max resolution 1920x1080  |                                   |  |
| VGA Output                  |   | 1   |   |                                   |  |
| Composite Output            | 1 x Main  | &1xSpot   | 2 x Spot  |                                   |  |
| Alarm Inputs                | 1 4   |   | 4 on 4 way, 8 on 8 way & 16 on 16 way                               |                                   |  |
| Alarm Outputs               |   | 1   | 4   |                                   |  |
| Audio Inputs                | 1   | 4   | 1 on 4/8 way & 4 on<br>16 way                                       | 8 on 8 way & 16 on 16 way         |  |
| Audio Outputs               |   | 1   |   |                                   |  |
| Compression                 |   | H.264   | 1   |                                   |  |
| Record Resolution           | D1 (720x576), 2CIF (720   | 0x288) or CIF (360x288)                             | 960H (960x576), D1 (720x576), 2CIF (720x288) or<br>CIF (360x288)    |                                   |  |
| Record Modes                | Normal/Alarm/Motio  | on/Duration/Schedule                                | Normal/Alarm/Motion/Audio Event/Duration/Schedule                   |                                   |  |
| Record Speed                | 25ips@D1, 50ips@  | 22CIF & 100ips@CIF                                  | 400ips@960H, 400ips@D1, 400ips@2CIF & 400ips@CIF                    |                                   |  |
| Playback Speed              |   | views (depends on recording<br>eed)                 | Real Time in single and<br>quad view (6fps in 8 or<br>16 way split) | Real Time across all screen views |  |
| Storage Capacity            | 320GB   |   | to 12TB   |                                   |  |
| Archive Storage             | USB   | CD/DVD & USB  | CD/DVD & 2 x USB  | CD/DVD, 2x USB & e-Sata           |  |
| Display Options Main        | 1/4   | 1/4 on 4 way, 1/4/8 on 8 way,<br>1/4/9/16 on 16 way | 1/4 on 4 way, 1/4/8 on 8 way, 1/4/9/16 on 16 way                    |                                   |  |
| Display Options Spot        | 1/4   | 1/4/9/16  | Fully Programmable  |                                   |  |
| RS485 Telemetry             | Vista, Pelco P or Pelco D Protocol  |   |   |                                   |  |
| FSK (up the coax) Telemetry | No  | Vista Protocol                                      | Vista & F   | Pelco Protocol                    |  |
| PTZ Control                 | PC/Mouse/IR Remote PC/Front Panel/Mouse/IR Remote Control & Remote Keyboard Control & Remote Keyboard |   |   |                                   |  |
| IR Remote Control           | Yes   |   |   |                                   |  |
| Mouse Control               | Yes   |   |   |                                   |  |
| Front Panel Control         | No Yes  |   |   |                                   |  |
| Password Users              | Admin, Manager + 25 Users   |   |   |                                   |  |
| Network Compatible          | Yes   |   |   |                                   |  |
| PC Remote Software          | Remote Client & OCMS  |   |   |                                   |  |
| Webrowser Connectivity      | Yes - Internet Explorer 5.0 or higher   |   |   |                                   |  |
| Mobile Viewing              | Android & iOS apps availabe   |   |   |                                   |  |

# **ACCESSORIES & SPARES**

| QPLUS-RK   | 0456950 | Rack mount kit for Quantum H264 960H range  |
|------------|---------|---|
| Q+MOUSE    | 0496280 | Spare mouse for Quantum DVR   |
| QTMREMOTE  | 0471080 | Spare IR remote control for Quantum DVR   |
| VPSU12UNIV | 0473270 | 12VDC, 5A, Universal PSU, for use with Quantum DVR, Monitors VFS-L/P/100/200/300, |
|            |         | supplied with 2.1mm plug and additional 2.5mm adaptor                             |



# MINI D

## MINI D

MiniD400 0496930 Single Channel mini DVR, H.264, 4CIF/2CIF/CIF recording, white, 1.8W (150mA), 12VDC, 90x45x17mm, PSU included, requires SD card

### **ACCESSORIES & SPARES**

0497120 IR Remote Spare IR remote for MiniD DVR



# SD CARD (recommended type) not included with DVR

MiniD400 SanDisk class 2 SD/SDHC card 32Gb maximum

# **KEY FEATURES - MINID400**

## REAL-TIME RECORDING

The MiniD-400 can record real-time images and audio in 4CIF, 2CIF or CIF on to a SanDisk standard SD or SDHC card with a maximum capacity of 32GB

### SMALL, COMPACT AND LIGHTWEIGHT

The miniature size (90x45x17mm) and lightweight construction (50g) makes the DVR ideal for covert recording and extremely

### **EASY TO INSTALL**

Once the output is connected to a monitor, the simple menu can be navigated using the IR remote control

## MOTION DETECTION AND ALARM INPUT

The MiniD-400 is able to start recording as soon as motion is detected in front of the camera or from an external alarm input, massively increasing the duration of recording

# PRE-ALARM WITH ADJUSTABLE TIME

Especially important when in event recording mode, pre-alarm records video prior to the alarm, allowing operators to see what triggered the alarm

# LED INDICATION OF ALARM/EVENT RECORDING

This simple visible alert, shows when alarm or event recording is activated.



# MINID400 PLAYER



MINID400 (0496930)



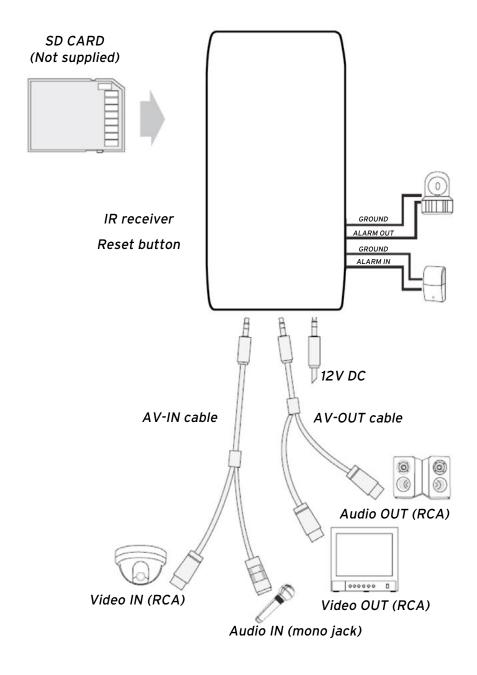
# MINID WIRING DIAGRAM

**REC LED**: Green LED blinks while recording

STATUS LED: Yellow LED blinks when an error occurs or while recording is proceeding

**POWER LED**: Red LED lights when power is on

Connection cables are included.





# **IP SOFTWARE & APPS**

### **KEY FEATURES - VK2 CLIENT SOFTWARE**

#### SD CARD PLAYBACK

Supports VK2 recorders (NVR's)

### **CLIENT SOFTWARE**

Supplied FOC with all VK2 cameras

### MULTIPLE CAMERA STREAMS

Connect to any number of cameras

### MULTI-VIEW VIEWING

View up to 64 cameras simultaneously across 4 monitors

## LOCAL RECORDING

Record up to 32 cameras locally

### REMOTE SET UP

Full control and set up of all VK2 cameras

### LIVE IMAGES OR RECORDED FOOTAGE

View live or SD card recorded images direct from the camera

Intuitive screen layouts and clear menu structure

# KEY FEATURES - VK2 REMOTE ANDROID APP

# SD CARD PLAYBACK

Playback recorded video stored directly on Vista VK2 cameras

# LIVE STREAMING

Access real-time live video from Vista VK2 cameras

# VIEWING GROUPS

View multiple cameras at one time

Complete control of PTZ cameras

## **AUDIO SUPPORT**

Bi-directional audio

## REMOTE CAMERA MANAGEMENT

Change camera settings without attending site

# KEY FEATURES - VK2 REMOTE IPHONE/IPAD APP

# SD CARD PLAYBACK

Remote playback of recorded video stored directly on Vista VK2 cameras

Access real-time live video from Vista VK2 cameras

View multiple cameras at one time

Complete control of PTZ cameras

# **AUDIO SUPPORT**

Bi-directional audio



### VK2\_REMOTE





# VK2\_REMOTE







# PC CONTROL

| _        |   | _ |     |     |     | _  |       |     | _   | _ | _ |
|----------|---|---|-----|-----|-----|----|-------|-----|-----|---|---|
| 7.       |   |   | NII | ١ ١ | 71  | F١ | M     | INI | 7.2 | ப |   |
| <b>.</b> | _ |   | N   | ١ ١ | , , |    | V V I | ш   | U   | _ | _ |

| VistaPC-i5-60-S                | 0657160 | Client PC, Windows 7 Pro, Intel i5 3.4GHz, 4GB RAM, 60GB solid state drive, dual monitor |
|--------------------------------|---------|--|
| NEW                            |         | output (1 x HDMi & 1 x DVI), DVR-RW drive, aluminium case, 150W (650mA), 230VAC,         |
|                                |         | 240x250x100mm, compatible with VK2 Client and Graphica Client software, requires         |
|                                |         | mouse/keyboard & PC monitor  |
| VistaPC-i5-120-S<br><b>NEW</b> | 0657170 | Client PC, Windows 7 Pro, Intel i5 3.4GHz, 4GB RAM, 120GB solid state drive, dual monito |
|                                |         | output (1 x HDMi & 1 x DVI), DVR-RW drive, aluminium case, 150W (650mA), 230VAC,         |
|                                |         | 240x250x100mm, compatible with VK2 Client and Graphica Client software, requires         |
|                                |         | mouse/keyboard & PC monitor  |

### **ACCESSORIES & SPARES**

|--|--|--|



# **VISTA PC**

## **KEY FEATURES - VISTAPC**

DEDICATED DUAL MONITOR OUTPUT
The Vista Client PC has a dedicated graphics card ensuring the best possible video quality

#### SOLID STATE DISK DRIVES

Improves system boot time and overall performance

Won't take up valuable desk space

# VK2 CLIENT AND GRAPHICA2 COMPATIBLE

Fully tested with VK2 Client and Vista Graphica2 Client

3RD PARTY CLIENT SOFTWARE SUPPORT
Built to industry standards, the Vista PC can be used with other 3rd party VMS clients

Brushed aluminium chassis ensures a professional look

# IP RECORDING



# **NVR**

| VK2 NVR                    |         |  |
|----------------------------|---------|--|
| VK2-RECO4HDW1<br>NEW       | 0658370 | 4ch VK2 NVR, 1TB HDD, H.264/MPEG4/MJPEG camera support, 25ips @ 1080p recording, 8 alarm input/output, expandable upto 8 devices (128 cameras), Wi-Fi, black case, 42W (3.5A), 12VDC PSU included, 60x192x255mm, compatible with VK2 cameras and VK2 Client software |
| VK2-RECO4HDW2<br>NEW       | 0658380 | 4ch VK2 NVR, 2TB HDD, H.264/MPEG4/MJPEG camera support, 25ips @ 1080p recording, 8 alarm input/output, expandable upto 8 devices (128 cameras), Wi-Fi, black case, 42W (3.5A), 12VDC PSU included, 60x192x255mm, compatible with VK2 cameras and VK2 Client software |
| VK2-RECO4HDW3<br>NEW       | 0658390 | 4ch VK2 NVR, 3TB HDD, H.264/MPEG4/MJPEG camera support, 25ips @ 1080p recording, 8 alarm input/output, expandable upto 8 devices (128 cameras), Wi-Fi, black case, 42W (3.5A), 12VDC PSU included, 60x192x255mm, compatible with VK2 cameras and VK2 Client software |
| VK2-REC16HD3<br>NEW        | 0656330 | 16ch VK2 NVR, 3TB HDD, H.264/MPEG4/MJPEG camera support, 25ips @ 1080p recording, 2 alarm input/output, expandable upto 8 devices (128 cameras), black case, 70W (550mA), 230VAC, 435x89x425.6mm, compatible with VK2 cameras and VK2 Client software                |
| VK2-REC16HD6<br>NEW        | 0656340 | 16ch VK2 NVR, 6TB HDD, H.264/MPEG4/MJPEG camera support, 25ips @ 1080p recording, 2 alarm input/output, expandable upto 8 devices (128 cameras), black case, 70W (550mA), 230VAC, 435x89x425.6mm, compatible with VK2 cameras and VK2 Client software                |
| VK2-REC16HD9<br><b>NEW</b> | 0656350 | 16ch VK2 NVR, 9TB HDD, H.264/MPEG4/MJPEG camera support, 25ips @ 1080p recording, 2 alarm input/output, expandable upto 8 devices (128 cameras), black case, 70W (550mA), 230VAC, 435x89x425.6mm, compatible with VK2 cameras and VK2 Client software                |
| VK2-REC16HD12<br>NEW       | 0656360 | 16ch VK2 NVR, 12TB HDD, H.264/MPEG4/MJPEG camera support, 25ips @ 1080p recording, 2 alarm input/output, expandable upto 8 devices (128 cameras), black case, 70W (550mA), 230VAC, 435x89x425.6mm, compatible with VK2 cameras and VK2 Client software               |

#### **KEY FEATURES - VK2-RECORDER**

Automatic detection, viewing and recording of Vista VK2 IP

### REAL-TIME FULL HD VIDEO STREAMS

Record real-time full HD 1080p video streams

#### **EMAIL ON EVENT**

Emails containing system performance and alarm information

Control PTZ domes via a simple click and drag

#### SIMPLE ARCHIVE DOWNLOADS

Export video in evidential or windows media format

#### VK2 ECOSYSTEM COMPATIBLE

Fully compatible with VK2 cameras, VK2 Client software and VK2 mobile Apps

## INTEGRATED WIFI (4 CH UNIT ONLY)

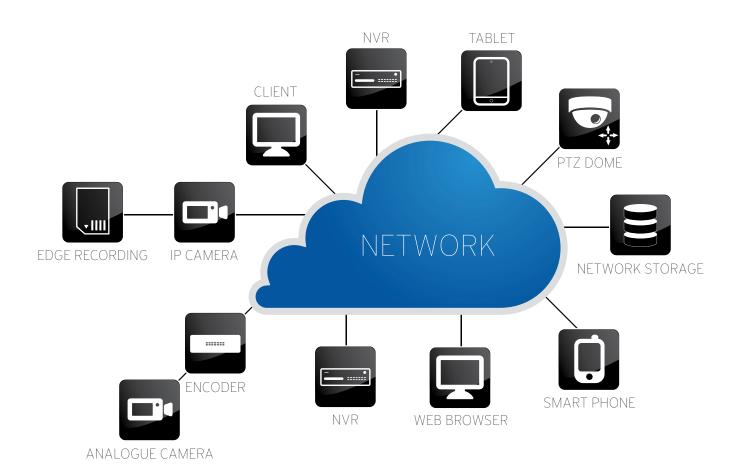
Removes the need to install CAT5 cabling to cameras



VK2-RECORDER



# **VK2 SYSTEM OVERVIEW**



# IP RECORDING



# **NVR**



#### **GRAPHICA SABRE NVR**

| OITAL THEA SABILE | . 14 4 14 |   |
|-------------------|-----------|---|
| SAB04-1000E       | 0473900   | 4ch Sabre NVR, 1TB HDD, H.264/MPEG4/MJPEG camera support, can be used with  |
|                   |           | Graphica as an NVR, black case, 250W (1A), 240VAC, 441x344x183mm            |
| SAB04-2000E       | 0473910   | 4ch Sabre NVR, 2TB HDD, H.264/MPEG4/MJPEG camera support, can be used with  |
|                   |           | Graphica as an NVR, black case, 250W (1A), 240VAC, 441x344x183mm            |
| SAB08-2000E       | 0473930   | 8ch Sabre NVR, 2TB HDD, H.264/MPEG4/MJPEG camera support, can be used with  |
|                   |           | Graphica as an NVR, black case, 250W (1A), 240VAC, 441x344x183mm            |
| SAB08-4000E       | 0474220   | 8ch Sabre NVR, 4TB HDD, H.264/MPEG4/MJPEG camera support, can be used with  |
|                   |           | Graphica as an NVR, black case, 250W (1A), 240VAC, 441x344x183mm            |
| SAB16-2000E       | 0473950   | 16ch Sabre NVR, 2TB HDD, H.264/MPEG4/MJPEG camera support, can be used with |
|                   |           | Graphica as an NVR, black case, 250W (1A), 240VAC, 441x344x183mm            |
| SAB16-4000E       | 0474230   | 16ch Sabre NVR, 4TB HDD, H.264/MPEG4/MJPEG camera support, can be used with |
|                   |           | Graphica as an NVR, black case, 250W (1A), 240VAC, 441x344x183mm            |
| SAB16-6000E       | 0474240   | 16ch Sabre NVR, 6TB HDD, H.264/MPEG4/MJPEG camera support, can be used with |
|                   |           | Graphica as an NVR, black case, 250W (1A), 240VAC, 441x344x183mm            |
|                   |           |   |

### **KEY FEATURES - SABRE**

#### CHOICE OF MODELS

4, 8 or 16 channel recording with up to 6TB of storage

Support for Megapixel cameras

### ARCHIVING

DVD and USB export

## EASY TO USE

Wizard-based simple configuration

#### MOBILE APPS

iPhone and iPad app for mobile viewing

#### RECORD AND PLAYBACK

Simultaneous live video and playback

#### 3RD PARTY CAMERA CONTROL

Supports multiple manufacturers' IP cameras

#### INTEGRATED INTO THE LATEST VERSION OF SABRE

Support for Vista eclipse2 360 degree panoramic camera

## PTZ CONTROL

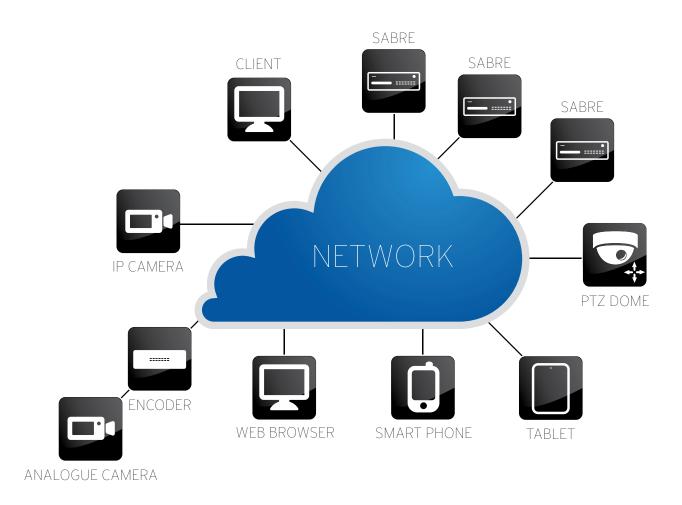
USB joystick support for PTZ control





# **SABRE OVERVIEW**





# IP VMS SOFTWARE



## **GRAPHICA2**



| CLIENT/SERVER LIG | CENSES      |  |
|-------------------|-------------|--|
| GP2-01C           | 0473610     | Graphica2 - 1 client/server license, NVR's must be on a separate PC  |
| GP2-04C           | 0473620     | Graphica2 - 4 client/server license, NVR's must be on a separate PC  |
| GP2-08C           | 0473630     | Graphica2 - 8 client/server license , NVR's must be on a separate PC |
| GP2-16C           | 0473640     | Graphica2 - 16 client/server license, NVR's must be on a separate PC |
| NVR LICENSES      |             |  |
| GP2-16NVR         | 0473650     | Graphica2 - 16 channel NVR license, NVR's must be on a separate PC   |
| GP2-32NVR         | 0473660     | Graphica2 - 32 channel NVR license, NVR's must be on a separate PC   |
| CLIENT/SERVER/NV  | VR LICENSES |  |
| GP2-01C16NVR      | 0473670     | Graphica2 - Single client/server & 16ch NVR license, on same PC      |
| GP2-04C16NVR      | 0473680     | Graphica2 - 4 client/server & 16ch NVR license, on same PC           |
| VIDEOWALL LICENS  | SE          |  |
| GP2-VW            | 0473750     | Graphica2 - 16ch video wall license                                  |



#### **KEY FEATURES - GRAPHICA2**

#### SCALABLE.

Supports up to 1024 concurrently viewed live or playback video streams

This allows user profiles and privileges to be built into the security system, or increased matrix type partitioning features and also system integrity and security. Up to 16 clients can operate from one server

# OPTIONAL INTEGRATED NVRS

16 and 32 channel software NVRs are available to enable RAID O, 5 and 6 recording of IP cameras, recording and mirroring of DVR

#### IP AND ANALOGUE INTEGRATION

Compatible with the Vista Sabre 4, 8 and 16 channel embedded NVRs, Network enabled DVRs, IP encoders and IP cameras allows legacy and 'best of breed' technology to be seamlessly incorporated

#### MULTIPLE MANUFACTURER CAMERA INTEGRATION

As well as the Vista VK2 range, Graphica2 supports multiple other manufacturers' cameras, including: ACTi, Arecont, Axis, Bosch, Mobotix, Panasonic, Pelco, Sanyo and Vivotek. Seamless integration means all camera images are displayed in the same format, regardless of manufacturer

The site maps allow for simple and intuitive navigation of any location

#### PT7 FUNCTIONALITY

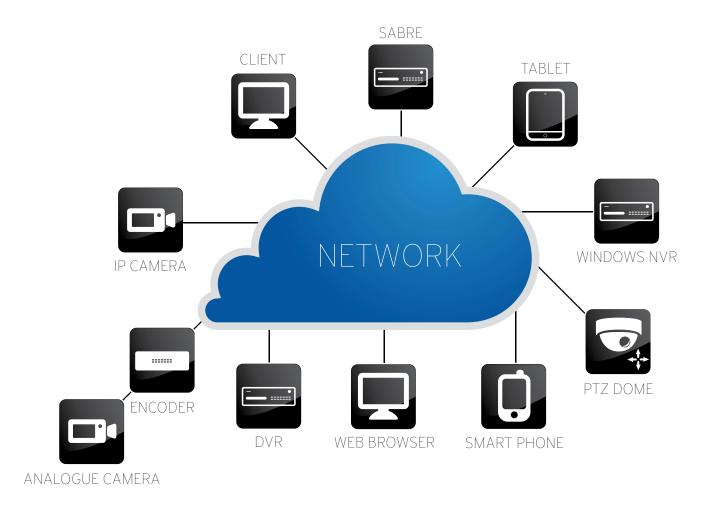
PTZ cameras can be controlled on-screen via simple mouse control

View live and recorded 360 degree panoramic images



# **GRAPHICA<sup>2</sup> OVERVIEW**







# **MONITORS**

| VFS-117LED | 0498600 | 17" LED, 1280x1024 pixels, 1000:1, 5ms, 1 x looping BNC, S-VIDEO, DVI, VGA, 1 x looping |
|------------|---------|---|
| NEW        |         | audio, black, VESA 100, 20W (1.66A), 12VDC, PSU included, 371x376x197mm                 |
| VFS-119LED | 0498610 | 19" LED, 1280x1024 pixels, 1000:1, 5ms, 1 x looping BNC, S-VIDEO, DVI, VGA, 1 x looping |
| NEW        |         | audio, black, VESA 100, 20W (1.66A), 12VDC, PSU included, 419x423x197mm                 |
| 200 SERIES |         |   |
| VFS-217    | 0472930 | 17" LCD, 1280x1024 pixels, 1000:1, 5ms, 2 x looping BNC, S-VIDEO, HDMI, VGA, 1 x        |
|            |         | looping audio, black, glass panel, VESA 100, 28W (2.5A), 12VDC, PSU included,           |
|            |         | 370x370x190mm   |
| VFS-219    | 0472940 | 19" LCD, 1280x1024 pixels, 1000:1, 5ms, 2 x looping BNC, S-VIDEO, HDMI, VGA, 1 x        |
|            |         | looping audio, black, glass panel, VESA 100, 28W (2.5A), 12VDC, PSU included,           |
|            |         | 420x415x190mm   |
| VFS-221W   | 0472950 | 21.5" wide screen LED, 1920x11080 pixels, 1000:1, 5ms, 2 x looping BNC, S-VIDEO, HDM    |
|            |         | VGA, 1 x looping audio, black, glass panel, VESA 100, 30W (2.5A), 12VDC, PSU included,  |
|            |         | 513x404x197mm   |
| 300 SERIES |         |   |
| VFS-317    | 0472970 | 17" LCD, 1280x1024 pixels, 1000:1, 5ms, 2 x looping BNC, S-VIDEO, HDMI, VGA, 1 x        |
|            |         | looping audio, black, glass panel, picture-in-picture, video-on-video, VESA 100, 29W    |
|            |         | (2.5A), 12VDC, PSU included, 370x370x190mm  |
| VFS-319    | 0472980 | 19" LCD, 1280x1024 pixels, 1000:1, 5ms, 2 x looping BNC, S-VIDEO, HDMI, VGA, 1 x        |
|            |         | looping audio, black, glass panel, picture-in-picture, video-on-video, VESA 100, 29W    |

## **DISPLAY MONITOR WITH INTEGRAL CAMERA**

| PVM-119M | 0497290 | 19" LED, 1280x1024 pixels, 1000:1, 5mS, 2 x looping BNC, HDMI, VGA, c/w 1 x integral |
|----------|---------|--|
| NEW      |         | camera, black, VESA mounting, 30W (2.5A), 240VAC/12VDC, PSU included,                |
|          |         | 463x440x81.2mm   |

(2.5A), 12VDC, PSU included, 420x415x190mm

#### **KEY FEATURES - VFS-100 LED**

## **CLEAR IMAGE**

First response and high contrast ensure excellent smear free image

#### LOW POWER CONSUMPTION

Greatly reduces monitors running cost

Added protection for screen

#### LED BACK LIT PANEL

Consumes approximately 50% of less than equivalent standard TFT monitor

# MULTIPLE INPUT: COMPOSITE, DVI AND VGA

Can be used as a PC or CCTV monitor - saving valuable reception desk space

### SIMPLE SETUP

Easy set-up via intuitive OSD menus.



#### MULTI LINGUAL ON SCREEN DISPLAY

Affords easy use across international applications

# 100MM VESA MOUNT

Allows the monitor to be mounted on virtually any standard bracket



|                          | VFS-117 LED    | VFS-119 LED     | VFS-217                       | VFS-219        | VFS-221W                 | VFS-317     | VFS-319     | PVM-119M                                  |  |
|--------------------------|----------------|-----------------|-------------------------------|----------------|--------------------------|-------------|-------------|---|--|
| PANEL TYPE               | 17" LED        | 19" LED         | 17" LCD                       | 19" LCD        | 21.5" WIDE<br>SCREEN LED | 17" LCD     | 19" LCD     | 19" LED                                   |  |
| VIEWING ANGLE            | 85/85/         | /80/80          | 80/80/80/80                   | 85/85          | 5/80/80                  | 80/80/80/80 | 85/85/80/80 | 85/85/80/80                               |  |
| CONTRAST RATIO           |                |                 |                               | 10             | 000:1                    |             |             |   |  |
| BRIGHTNESS               |                |                 |                               | 250            | Ocd/m2                   |             |             |   |  |
| RESOLUTION               |                | 1280x           | 1024                          |                | 1920x1080                |             | 1280x1024   |   |  |
| HORIZONTAL<br>RESOLUTION | 550            | TVL             |                               |                | 70                       | OTVL        |             |   |  |
| RESPONSE TIME<br>(ms)    |                |                 |                               | <              | 5ms                      |             |             |   |  |
| HDMI INPUT               | N,             | /A              |                               |                | •                        |             |             |   |  |
| PC INPUTS                | DVI &          | VGA             |                               |                | VGA                      |             |             |   |  |
| COMPOSITE VIDEO INPUTS   | 1 x Looping BN | C & 1 x S-Video | 2 x Looping BNC & 1 x S-Video |                |                          |             |             | 2 x Looping<br>BNC                        |  |
| AUDIO INPUTS             |                |                 | 1                             |                |                          |             |             |   |  |
| AUDIO OUTPUTS            |                |                 |                               |                | 1                        |             |             |   |  |
| SPEAKERS                 |                |                 |                               | 2              | x 1W                     |             |             |   |  |
| FRONT PANEL<br>KEYLOCK   |                |                 |                               |                | •                        |             |             |   |  |
| RUNNING HOURS            |                |                 |                               |                | •                        |             |             |   |  |
| PICTURE FREEZE           | N              | 0               |                               |                | •                        |             |             | No  |  |
| PICTURE-IN-PICTURE       |                |                 | No                            |                |                          |             | •           |   |  |
| SCREEN SPLITTER          |                |                 | No                            |                |                          | •           |             | No  |  |
| GLASS FRONT              | •              |                 |                               |                |                          |             |             | No  |  |
| CASE                     |                |                 |                               | Plastic        |                          |             |             |   |  |
| HOUSING COLOUR           |                |                 |                               | E              | Black                    |             |             |   |  |
| VOLTAGE                  |                |                 | 100 - 240VA                   | C to 12VDC Ada | ptor supplied            |             |             | 240VAC or<br>24VDC<br>Adaptor<br>supplied |  |

### **KEY FEATURES - VFS-200 SERIES**

MULTIPLE INPUTS: HDMI, COMPOSITE, VGA AND AUDIO Can be used as both a PC monitor and a CCTV monitor, so saving space on a reception desk

#### **GLASS FRONT PANEL**

Gives extra protection to the screen

## 100MM VESA MOUNT

Allows the monitor to be mounted on virtually any standard bracket

# SIMPLE SETUP

Easy set-up via intuitive OSD menus

## MULTI LINGUAL ON SCREEN DISPLAY

Affords easy use across international applications





# **VESA MONITOR BRACKETS**

Strong secure and lightweight

The new range of Vista vesa mount monitor brackets are made from an extremely strong and lightweight engineering composite.

Simple to install, this new material ensures all brackets are extremely tough and will not rust or corrode over time.

All units are designed for monitors with 100 x100 or 75 x 75mm Vesa mount spacing's.



**VESAWMPT** 0498630



**VESAWM** 0498620



**VESAWMPTE** 0498640

## KEY FEATURES - VESA BRACKETS

#### GRP INJECTION MOULDED

The material used to make these brackets makes them very lightweight but at the same time very strong, with a very low carbon footprint

#### STANDARD VESA MOUNT

All brackets have both 75 and 100mm standard mount spacing, so will fit any standard Vesa mount monitor

#### UP TO 15KG LOAD

Suitable for all monitor up to approx 23" screen size



# **MONITORS**

| 0498620 | Vesa flush fit wall bracket, black, 75/100mm, up to 15kg   |
|---------|--|
| 0498630 | Vesa tilt & turn wall bracket, black, 75/100mm, up to 15kg   |
| 0498640 | Vesa tilt & turn extended wall bracket, black, 75/100mm, up to 15kg  |
| 0444040 | Vesa flush fit wall bracket, black, 75/100/200X100mm   |
| 0096570 | Vesa wall/ceiling bracket, 75/100mm, 1 metre drop, black   |
| 0098100 | Vesa ceiling bracket, 75/100mm, 1 metre drop, cream  |
| 0093650 | Vesa ceiling bracket, 75/100mm, 1 metre drop, black  |
| 0251750 | Internal monitor pole mount ceiling adapter, black   |
| 0249130 | Internal monitor pole mount girder adapter, black  |
| 0092210 | 2m pole, supplied with coupler, chrome   |
| 0264980 | Single LCD pole adapter, black   |
| 0264990 | Double LCD pole adapter, black   |
|         | 0498630<br>0498640<br>0444040<br>0096570<br>0098100<br>0093650<br>0251750<br>0249130<br>0092210<br>0264980 |

### **ACCESSORIES & SPARES**

| VPSU12UNIV | 0473270 | 12VDC, 5A, Universal PSU, for use with Quantum DVR, Monitors VFS-L/P/100/200/300, |
|------------|---------|---|
|            |         | supplied with 2.1mm plug and additional 2.5mm adaptor                             |
| VFSM20-PSU | 0396900 | PSU for VFSM20  |
| VFSM20/REM | 0271810 | Remote control for VFSM20   |





FOR INFORMATION ON OUR

**VESAPA1** (0264980)

**VESAPA2** (0264990)



# SMART TRANSMISSION RANGE OVERVIEW

The Smart range of products enables remote viewing from any PC, laptop and numerous mobile devices, from anywhere in the world. Units can transmit live video, pre-recorded video or respond on the activation of an alarm event. Technology now provides more mobile solutions so that vehicles can be fitted with recording devices and also a tracking feature either in live mode or review at a later date from the removable hard drive.

#### **SMARTTEL**

Transmission only device that can be added to an existing site where a DVR is installed. Can be connected to virtually any network/ dial up connection. Built in audio for 2 way communication, alarm inputs for automatic dial up and full PTZ control provides the ultimate remote monitoring solution



#### **SMARTDISC**

All of the features of the SmartTel but with an internal hard drive for remote on site recording and remote playback. A real-time unit is available for 25ips recording per channel



#### SMARTDISC IP

All of the features of the SmartDisc but with the ability to connect both IP or standard cameras. Using Vista's unique HT compression algorithm, live images are effectively compressed and transmitted, making maximum use of available hard drive storage and requiring less bandwith to transmit images



### **SMARTMOBILE**

Similar to the SmartDisc unit, except can be installed into a mobile environment with the more robustly supported internal hard drive. With the use of the optional 3G router, aerial and tracking feature, remote surveillance of the vehicle can be closely monitored



# TRANSMISSION



# SMARTCONTROL SOFTWARE OVERVIEW

#### SMARTCONTROL LITE

Connection to any single site to view live video, review recorded footage or respond to an alarm event



#### SMARTCONTROL PRO

Connection to multiple sites to view live video, review recorded footage or respond to an alarm events



### SMART VIDEOWALL

All of the features of SmartControl Pro with the ability to view up to 64 images on 4 separate monitors



## VIDEO EVENT MANAGEMENT - EMS

All of the features of SmartControl Pro with the ability to have separate control stations with the server/ client architecture. Interactive site maps provide extra information to the controller with the location of the intruder



### SMART APPS AND WEBROWSER VIEWING

Smart transmission devices can be connected via a wide range of mobile devices. Webrowser facility enables connection via Internet applications on the latest in mobile technology, a dedicated Smart App for the iPhone and iPad is available

The Smart range of products is supported Nationally by many ARC & VRC Central Stations. Please contact your account manager for the latest list or coverage in your area.



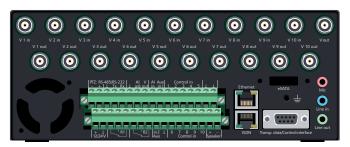


# **SMARTTEL RANGE**

#### **SMARTTEL - TRANSMISSION ONLY**

| VLS2-04TR | 0480180 | 4 channel, built-in LAN, telemetry, audio, BS8418 alarms & 16000 event log, black, 4.8W  |
|-----------|---------|--|
| NEW       |         | (400mA) @ 12VDC, PSU included, 221x270x88mm  |
| VLS2-10TR | 0480190 | 10 channel, built-in LAN, telemetry, audio, BS8418 alarms & 16000 event log, black, 4.8W |
| NEW       |         | (400mA) @ 12VDC, PSU included, 221x270x88mm  |





## **SMARTTEL 10 CHANNEL**

### **KEY FEATURES - SMARTTEL RANGE**

## BS8418:2010 COMPLIANT

#### 4 AND 10 CHANNEL VARIANTS

Available in either 4 or 10 channel analogue versions allows images from cameras to be compressed by the highly efficient HTcompress algorithm making for smaller file sizes for remote viewing and transmission over a network

#### PRE-ALARM BUFFER

The pre-alarm buffer of 28MB ensures that images taken immediately before the alarm event can also be transmitted along with the alarm event, which provides greater information as to the nature of the alarm

#### MULTICAST TRANSMISSION WITH WEBSERVER APPLICATION

Use with up to 6 IP, or 5 IP and 1 dial-up connection, or 4 IP and 2 dial-up connections simultaneously - as well as up to 4 IP connections via PC, Smartphone, plus PDA browser (additional to 6 standard connections)

# FULLY COMPATIBLE WITH ALL SMART CONTROL AND EMS SOFTWARE PACKAGES

Vista's seamless approach to systems integration allows multiple IP or analogue units to be installed without the need for separate software, reducing required operator training and time, and retaining the same, familiar software front end

#### INTEGRATED AUDIO AND PTZ/DOME CONTROL

SmartDisc features PTZ/dome control, and bidirectional audio transmission and recording to enable voice warnings to be made. SmartControl or EMS software removes the need for a keyboard at the PC



# **SMARTDISC RANGE**

#### **SMARTDISC - TRANSMISSION & RECORD**

| VLS2-02RT1TNA | 0480330 | 2 channel, Real Time, built-in LAN, built-in 1TB storage, telemetry, BS8418 alarms & 16000  |
|---------------|---------|---|
| NEW           |         | event log, black, 10.8W (900mA) @ 12VDC, PSU included, 221x270x44mm                         |
| VLS2-02RT1T   | 0480200 | 2 channel, Real Time, built-in LAN, built-in 1TB storage, telemetry, audio, BS8418 alarms & |
| NEW           |         | 16000 event log, black, 10.8W (900mA) @ 12VDC, PSU included, 221x270x44mm                   |
| VLS2-04DRNA   | 0480220 | 4 channel, built-in LAN, telemetry, BS8418 alarms & 16000 event log, requires HDD, black,   |
| NEW           |         | 13.2W (1.1A) @ 12VDC, PSU included, 221x270x88mm  |
| VLS2-04DR     | 0480230 | 4 channel, built-in LAN, telemetry, audio, BS8418 alarms & 16000 event log, requires HDD,   |
| NEW           |         | black, 13.2W (1.1A) @ 12VDC, PSU included, 221x270x88mm                                     |
| VLS2-04RT     | 0480240 | 4 channel, Real Time, built-in LAN, telemetry, audio, BS8418 alarms & 16000 event log,      |
| NEW           |         | requires HDD, black, 18W (1.5A) @ 12VDC, PSU included, 221x270x88mm                         |
| VLS2-10DRNA   | 0480250 | 10 channel, built-in LAN, telemetry, BS8418 alarms & 16000 event log, requires HDD, black,  |
| NEW           |         | 15.6W (1.3A) @ 12VDC, PSU included, 221x270x88mm  |
| VLS2-10DR     | 0480260 | 10 channel, built-in LAN, telemetry, audio, BS8418 alarms & 16000 event log, requires HDD,  |
| NEW           |         | black, 15.6W (1.3A) @ 12VDC, PSU included, 221x270x88mm                                     |
| VLS2-10RT     | 0480280 | 10 channel, Real Time, built-in LAN, telemetry, audio, BS8418 alarms & 16000 event log,     |
| NEW           |         | requires HDD, black, 26.4W (2.2A) @ 12VDC, PSU included, 221x270x88mm                       |
|               |         |   |

#### **KEY FEATURES - SMARTDISC RANGE**

All of the Smart VLS2 Transmission and Recording devices are BS8418:2010 compliant, with a >16000 event log and End of Line (EoL) monitored alarm inputs - with dedicated BS8418 setting in the alarm menu.

### 2,4 AND 10 CHANNEL VARIANTS

Either in 2, 4 or 10 channel analogue versions with IP camera support allows images to be recorded to this unit, which supports simultaneous use of different models and resolutions

With user definable frame rate and adaptive track management to the removable SATA hard drive, permits how much of the HDD and  $\,$ frame rate is apportioned to a particular camera

This highly efficient compression medium makes for smaller file sizes for remote viewing, transmission and recording over a network

# MULTICAST TRANSMISSION WITH WEBSERVER APPLICATION

Use with up to 6 IP, or 5 IP and 1 dial-up connection, or 4 IP and 2 dial-up connections simultaneously  $\dot{\overline{}}$  as well as up to 4 IP connections via PC, Smartphone, plus PDA browser (additional to 6 standard connections)

# FULLY COMPATIBLE WITH ALL SMART CONTROL AND EMS SOFTWARE PACKAGES

Vista's seamless approach to systems integration allows multiple IP or analogue units to be installed without the need for separate software, reducing required operator training and time, and retaining the same, familiar software front end

#### INTEGRATED AUDIO AND PTZ/DOME CONTROL

SmartDisc features PTZ/dome control, and bidirectional audio transmission and recording to enable voice warnings to be made. SmartControl or EMS software removes the need for a keyboard at the PC





#### **SMARTDISC 2 CHANNEL REAL-TIME**





**SMARTDISC 10 CHANNEL REAL-TIME** 

# TRANSMISSION



# SMARTDISC IP

# **SMARTDISC IP - TRANSMISSION & RECORD**

VLS2-10IPRT **NEW** 

0480270

10 channel, Real Time, IP/Hybrid, built-in LAN, telemetry, audio, BS8418 alarms & 16000 event log, requires HDD, black, 49.2W (4.1A) @ 12VDC, PSU included, 221x270x88mm





### **SMARTDISC IP 10 CHANNEL REAL-TIME**

#### KEY FEATURES - SMARTDISC IP RANGE

#### BS8418:2010 COMPLIANT

All of the Smart VLS2 Transmission and Recording devices are BS8418:2010 compliant, with a >16000 event log and End of Line (EoL) monitored alarm inputs - with dedicated BS8418 setting in the alarm menu.

Up to 10 IP cameras can be streamed and recorded to this unit, which supports simultaneous use of different models and resolutions

#### UP TO 4TB RECORDING

Featuring a choice of either 1, 2 or 4Tb removable SATA hard drives, with adaptive track management, which permits how much of the HDD is apportioned to a particular camera

This highly efficient compression medium allows the true use of megapixel IP cameras for remote viewing, transmission and recording

#### MULTICAST TRANSMISSION WITH WEBSERVER APPLICATION

Use with up to 6 IP, or 5 IP and 1 dial-up connection, or 4 IP and 2 dial-up connections simultaneously - as well as up to 4  $\ensuremath{\text{IP}}$ connections via Pc, Smartphone, plus PDA browser (additional to 5 standard connections)

# FULLY COMPATIBLE WITH ALL SMART CONTROL AND EMS

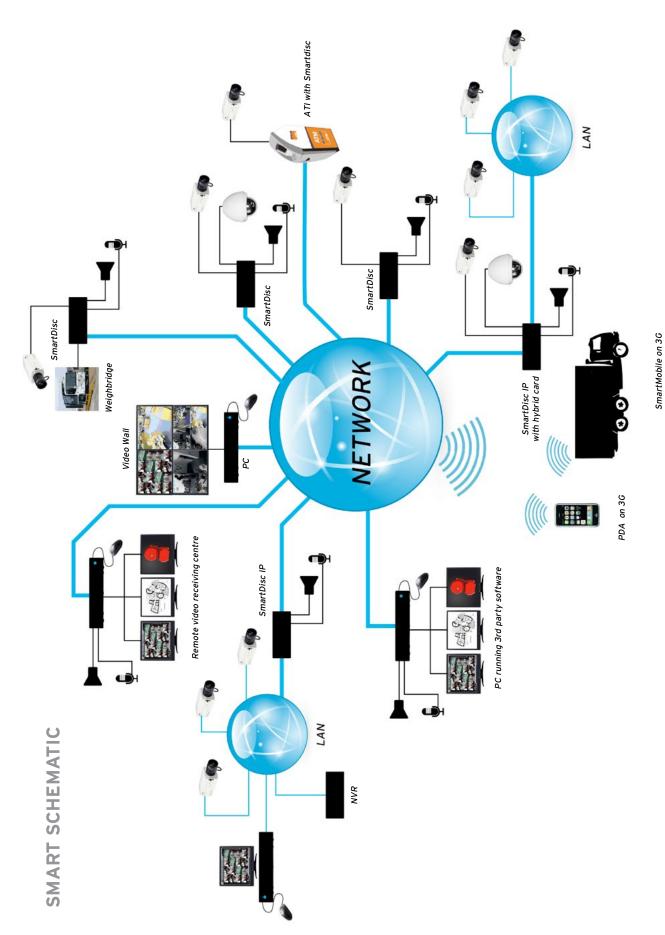
Vista's seamless approach to systems integration allows multiple IP or analogue units to be installed without the need for separate software, reducing required operator training and time, and retaining the same, familiar software front end

#### INTEGRATED AUDIO AND PTZ/DOME CONTROL

SmartDisc IP features PTZ/dome control, and bidirectional audio transmission and recording to enable voice warnings to be made. SmartControl or EmS software removes the need for a keyboard at the PC



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# **SMARTMOBILE RANGE**

#### **SMARTMOBILE - TRANSMISSION & RECORD**

| VLS2-02RTCF3GNA | 0480210 | 2 channel, Real Time, 1 x analogue & 1 x IP input or 2 IP inputs, BS8418 alarms & 16000 event |
|-----------------|---------|---|
| NEW             |         | log, integrated 3G router requires compact flashcard up to 64GB (not provided), black, 10W    |
|                 |         | (830mA) @ 12-24VDC, 116x44x137mm  |
| VLS2-02RTCF3G   | 0480340 | 2 channel, Real Time, 1 x analogue & 1 x IP input or 2 IP inputs, audio, BS8418 alarms &      |
| NEW             |         | 16000 event log, integrated 3G router requires compact flashcard up to 64GB (not              |
|                 |         | provided), black, 10W (830mA) @ 12-24VDC, 116x44x137mm  |
| VLS2-02RT1T3GNA | 0480350 | 2 channel, Real Time, 1 x analogue & 1 x IP input or 2 IP inputs, BS8418 alarms & 16000 event |
| NEW             |         | log, integrated 3G router, built-in 1TB storage, black, 13W (1.1A) @ 12-24VDC, 116x44x137mm   |
| VLS2-04DRMOB    | 0480290 | 4 channel, built-in LAN, telemetry, audio, BS8418 alarms & 16000 event log, requires Mobile   |
| NEW             |         | HDD, black, Max 13.2W (1.1A) @ 12VDC, 8-40VDC, PSU included, 221x270x88mm                     |
| VLS2-10RTMOB    | 0480360 | 10 channel, Real Time, built-in LAN, telemetry, audio, BS8418 alarms & 16000 event log,       |
| NEW             |         | requires Mobile HDD, black, Max 26.4W (2.2A) @ 12VDC, 8-40VDC, PSU included,                  |
|                 |         | 221x270x88mm  |
|                 |         |   |

#### KEY FEATURES - SMARTMOBILE RANGE

#### BS8418:2010 COMPLIANT

#### RUGGEDISED 2, 4 AND 10 CAMERA SYSTEMS

The SmartMobile range offers a number of options, all designed specifically for the transport sector

#### VIBRATION PROTECTED HARD DRIVE

Developed specifically for mobile applications, the 2.5" IDE removable hard drive sits on a shock absorbent platform, allowing for highly robust and reliable performance

#### FLEXIBLE POWER SUPPLY WITH INTEGRATED TRANSFORMER

Each unit receives its power from the host vehicle, making the 8 to 40V DC wide-ranging power supply ideal for the majority of applications. the 12V DC cameras are then powered via the integrated voltage transformer contained within the SmartMobile units

## MULTIPLE NETWORK AND DIAL-UP SUPPORT

The integrated multi-unicast server allows for multiple connections over wireless LAN and GSM/GPRS networks

# ALARM CONNECTION WITH VIDEO TRANSMISSION TO MONITORING CENTRES

Should an alarm be triggered, either manually or via an event, the driver will receive immediate support and verification of the incident. Additionally an operator can monitor the location of the vehicle at any time





SMARTMOBILE 2 CHANNEL REAL-TIME INCLUDES 1TB STORAGE





# SMARTMOBILE 2 CHANNEL REAL-TIME REQUIRES COMPACT FLASH CARD





**SMARTMOBILE 10 CHANNEL REAL-TIME** 



# **SMARTMOBILE RANGE**

#### SMARTCONTROL SOFTWARE WITH GPS TRACKING





# **SMART RANGE ACCESSORIES**

| 1.1 | DI  | \ F | - |     | N 4 | AF | <b>5</b> | ь. | A NI |   | - |
|-----|-----|-----|---|-----|-----|----|----------|----|------|---|---|
| н   | IJL | ノト  | U | K 3 | IVI | Αŀ | RT.      | ĸ, | 4 IN | G | - |

| VLS2-DR1TB    | 0480300 | 1TB HDD for "VLS2" SmartDisc and SmartDisc IP  |
|---------------|---------|--|
| VLS2-DR2TB    | 0480310 | 2TB HDD for "VLS2" SmartDisc and SmartDisc IP  |
| VLS2-DR4TB    | 0480370 | 4TB HDD for "VLS2" SmartDisc and SmartDisc IP  |
| VLS2-DRMOB1TB | 0480320 | 1TB HDD for "VLS2" SmartMobile                 |
| VLS-DR1000    | 0442730 | 1000GB HDD for discontinued "VLS" SmartDisc    |
| VLS-DR2000    | 0470700 | 2000GB HDD for discontinued "VLS" SmartDisc    |
| VLS-DR1000MOB | 0658770 | 1000GB HDD for discontinued "VLS" SmartMobile  |
| VLS-DR/IP1000 | 0495990 | 1000GB HDD for discontinued "VLS" SmartDisc IP |
| VLS-DR/IP2000 | 0470710 | 2000GB HDD for discontinued "VLS" SmartDisc IP |
|               |         |  |

#### **ACCESSORIES & SPARES**

| VLS-AIM           | 0310560 | Audio interface module, to interface with Videx audio panels                       |
|-------------------|---------|--|
| VLS-ALM50R        | 0478830 | 50 BS8418 alarm/8 relay input expansion module                                     |
| VLS-16RM          | 0252360 | 16 output relay expansion module   |
| VLS-DRUSBe        | 0345250 | USB PC kit for review of HDD, for use with SmartDisc and SmartMobile (VLS only)    |
| VLS-DR/HNVR/USB   | 0496000 | USB PC kit for review of HDD, for use with SmartDisc IP                            |
| VLS-3G/GPS AERIAL | 0496420 | Aerial for use with 3G/GPS router  |
| VLS-3G/GPS ROUTER | 0496410 | 3G router with integrated GPS. Requires SIM card and 0496420 VLS-3G/GPS aerial     |
| VLS-HC/IP         | 0471030 | 4 channel analogue video input card for SmartDisc IP (max 2 per SmartDisc IP unit) |
| VLS-RMK/single    | 0471870 | Single Smart unit rack mount kit   |
| VLS-RMK/double    | 0471880 | Double Smart unit rack mount kit   |
| VLS-MOBMT         | 0296130 | SmartMobile mounting plate   |
| VLS-TA            | 0096580 | Stollman ISDN terminal adapter   |
| VLS-PSU           | 0255300 | Spare 48W (4A) 12VDC power supply for the SmartDisc/Tel Range (not IP)             |
| VLS-AUDIOBRD      | 0395610 | Spare audio PCB for the Smart Range  |
|                   |         |  |

## **SOFTWARE**

| VLS-CPRO      | 0252090 | Software for multi-site viewing up to 21 sites simultaneously, 1 user licence USB dongle |
|---------------|---------|--|
| VLS-CCLNT EMS | 0262330 | Smart EMS Client software, up to 50 per VLS-CSER   |
| VLS-CSER EMS  | 0496130 | Smart EMS Server software and MySQL PRO license database engine for use with             |
|               |         | Smart range of products, up to 50 operator station clients available separately          |
| VLS-VW        | 0495930 | Videowall software for connection of up to 64 cameras simultaneously                     |
| VLS-SVSS      | 0399360 | SmartVideo server software SDK   |

#### KEY FEATURES - VLS-CAM600IR

#### HIGH-RESOLUTION IMAGING

600TVL resolution colour and monochrome images deliver maximum scene detail

#### SOFTWARE DAY/NIGHT OPERATION

Provides clear monochrome images in low light conditions which are fully IR sensitive allowing the camera to operate at Olux

## INTEGRAL 3.6MM LENS

High-quality wide-angle lens provides 63° field of view

The easy to use OSD provides access to features such as DWDR,2D-DNR, AGC, BLC, HLC (Peak White Inversion), ensuring





that the best possible images are achieved regardless of the lighting conditions. Park line feature allows lines to be overlaid onto the image to assist with vehicle movements

## INTERNAL OR EXTERNAL OPERATION

The IP66 rating and low profile vandal resistant housing permits flexibility of installation

# TRANSMISSION



|                             | SMARTTE  | птец   |   |  | SMARTDISC   |  |  | SMARTDISCIP  | SMARTCF   |   | SMARTMOBILE  |   |
|-----------------------------|--|--|---|--|---|--|--|--|---|---|--|---|
|                             | 04   | 10   | 02 (RT + 1TB)   | 04   | 04 (RT)   | 10   | 10 (RT)  | 10 (RT)  | 02 (RT)   | 02 (RT + 1TB)   | 04   | 10 (RT)   |
| VIDEO INPUTS                | 4  | 10   | 2   | 4  | 4   | 10   | 10   | Optional up to 8   | 1   | 1   | 4  | 10  |
| VIDEO OUTPUTS (LOCAL)       | -  | -  | oN<br>ON  | -  | -   | -  | -  | oN.  | oN<br>N   | 92  | -  | -   |
| IP INPUTS                   | 4  | 10   | 2   | 4  | 4   | 10   | 10   | 10   | 2   | 2   | 4  | 10  |
| ANALOGUE IMAGE QUALITY      | 720 x 288 pixels   | 720 x 288 pixels   | 720 x 288 pixels  | 720 x 288 pixels   | 720 x 288 pixels  | 720 x 288 pixels   | 720 x 288 pixels   | 720 x 288 pixels   | 720 x 288 pixels  | 720 x 288 pixels  | 720 x 288 pixels   | 720 x 288 pixels  |
| IP IMAGE QUALITY            | up to 5MP  | up to 5MP  | up to 5MP   | up to 5MP  | up to 5MP   | up to 5MP  | up to 5MP  | up to 5MP  | up to 5MP   | up to 5MP   | up to 5MP  | up to 5MP   |
| MAXIMUM ips RECORDING       | n/a  | n/a  | 25ips per ch  | 25ips global   | 25ips per ch  | 25ips global   | 25ips per ch   | 25ips per ch   | 25ips per ch  | 25ips per ch  | 25ips global   | 25ips per ch  |
| ANALOGUE COMPRESSION        | JPEG/HTcompress  | JPEG/HTcompress  | JPEG/HTcompress   | JPEG/HTcompress  | JPEG/HTcompress   | JPEG/HTcompress  | JPEG/HTcompress  | JPEG/HTcompress  | JPEG/HTcompress   | JPEG/HTcompress   | JPEG/HTcompress  | JPEG/HTcompress   |
| IP COMPRESSION              | JPEG/MJPEG   | JPEG/MJPEG   | JPEG/MJPEG  | JPEG/MJPEG   | JPEG/MJPEG  | JPEG/MJPEG   | JPEG/MJPEG   | JPEG/MJPEG/HT-<br>compress/H264  | JPEG/MJPEG  | JPEG/MJPEG  | JPEG/MJPEG   | JPEG/MJPEG  |
| CONDITIONAL REFRESH         | Selectable   | Selectable   | Selectable  | Selectable   | Selectable  | Selectable   | Selectable   | Selectable   | Selectable  | Selectable  | Selectable   | Selectable  |
| RECORDING MODES             | n/a  | e/u  | Continuous & Event  | Continuous & Event   | Continuous & Event  | Continuous & Event   | Continuous & Event   | Continuous & Event   | Continuous & Event  | Continuous & Event  | Continuous & Event   | Continuous & Event  |
| HDD STORAGE                 | n/a  | e/u  | 1118  | up to 4TB  | up to 4TB   | up to 4TB  | up to 4TB  | up to 4TB  | "up to 64GB (to<br>Compact  | ПВ  | 1TB  | 1TB   |
| REMOVABLE HDD               | n/a  | n/a  | ON  | Yes  | Yes   | sək  | Yes  | Yes  | NO  | 0N  | Yes  | Yes   |
| PRE-ALARM RECORDING (RAM)   | Approx 1000 images   | Approx1000<br>images   | n/a   | n/a  | n/a   | e/u  | n/a  | n/a  | e/u   | n/a   | e/u  | e/u   |
| AUDIO INPUTS                | 1x Line in & 1x Mic in   | 1x Line in &1x<br>Mic in   | 1× Line in  | 1x Line in & 1x<br>Mic in  | 1x Line in & 1x<br>Mic in   | 1 x Line in &1 x<br>Mic in   | 1 x Line in &1 x<br>Mic in   | 1x Line in &1x<br>Mic in   | 1x Line in  | 1 x Line in   | 1xLine in &1x<br>Mic in  | 1x Line in &1 x<br>Mic in   |
| AUDIO OUTPUTS               | 1x Line out  | 1 x Line out   | 1 x Line out  | 1 x Line out   | 1 x Line out  | 1 x Line out   | 1 x Line out   | 1 x Line out   | 1 x Line out  | 1 x Line out  | 1 x Line out   | 1x Line out   |
| PTZ CONTROL                 | Integrated   | Integrated   | Integrated  | Integrated   | Integrated  | Integrated   | Integrated   | Integrated   | Integrated  | Integrated  | Integrated   | Integrated  |
| SERIAL INPUT                | _  | _  | _   | _  | _   | _  | _  | _  | _   | _   | _  | _   |
| BS8418;2010 COMPLIANT       | Yes  | Yes  | Yes   | Yes  | Yes   | Yes  | Yes  | Yes  | Yes   | Yes   | Yes  | Yes   |
| EVENT LOG                   | > 16000  | > 16000  | > 16000   | >16000   | >16000  | > 16000  | > 16000  | >16000   | > 16000   | >16000  | > 16000  | > 16000   |
| ALARM INPUTS                | 4 (additional 50 with optional ALM50R) EoL + 1x tamper & 1x arm/disarm | 10 (additional 50<br>with optional<br>ALM50R) EoL + 1x<br>tamper & 1x arm/<br>disarm | 2 (additional 50<br>with optional<br>ALMSOR) EoL + 1x<br>tamper & 1x arm/<br>disarm | 4 (additional 50 with optional ALMSOR) EoL + 1x tamper & 1x arm/disarm | 4 (additional 50<br>with optional<br>ALM50R) EoL + 1x<br>tamper & 1x arm/<br>disarm | 10 (additional 50<br>with optional<br>ALM50R) EoL + 1 x<br>tamper & 1 x arm/<br>disarm | 10 (additional 50<br>with optional<br>ALM50R) EoL + 1 x<br>tamper & 1 x arm/<br>disarm | 10 (additional 50<br>with optional<br>ALM50R) EoL + 1x<br>tamper & 1x arm/<br>disarm | 2 (additional 50<br>with optional<br>ALM50R) EoL + 1 x<br>tamper & 1 x arm/<br>disarm | 2 (additional 50<br>with optional<br>ALM50R) EoL + 1x<br>tamper & 1x arm/<br>disarm | 4 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm | 10 (additional 50 with optional ALM50R) EoL + 1x tamper & 1x arm/disarm |
| ALARM/RELAY OUTPUTS         | 2 (additional 8 with optional ALM50R)                                  | 2 (additional 8 with optional ALM50R)  | 2 (additional 8 with optional ALM50R)   | 2 (additional 8 with optional ALM50R)                                  | 2 (additional 8 with optional ALM50R)   | 2 (additional 8 with optional ALM50R)  | 2 (additional 8 with optional ALM50R)  | 2 (additional 8 with optional ALM50R)  | 2 (additional 8 with optional ALM50R)   | 2 (additional 8 with optional ALM50R)   | 2 (additional 8 with optional ALM50R)                                    | 2 (additional 8 with optional ALM50R)                                   |
| ETHERNET PORTS              | 1  | 1  | 1   | 1  | 1   | 1  | 1  | 2  | 1   | 1   | 1  | 1   |
| MOTION DETECTION ZONES      | Yes  | Yes  | Yes   | Yes  | Yes   | Yes  | Yes  | Yes  | Yes   | Yes   | Yes  | Yes   |
| PRIVACY ZONES (ANALOGUE)    | Yes  | Yes  | Yes   | Yes  | Yes   | Yes  | Yes  | Yes  | Yes   | Yes   | Yes  | Yes   |
| PASSWORD PROTECTION         | Yes  | Yes  | Yes   | Yes  | Yes   | Yes  | Yes  | Yes  | Yes   | Yes   | Yes  | Yes   |
| CLIENT SOFTWARE             | Smart Lite, Pro, EMS<br>and VideoWall                                  | Smart Lite, Pro,<br>EMS and VideoWall  | Smart Lite, Pro, EMS<br>and VideoWall   | Smart Lite, Pro, EMS and VideoWall                                     | Smart Lite, Pro, EMS and VideoWall  | Smart Lite, Pro, EMS and VideoWall   | Smart Lite, Pro, EMS and VideoWall   | Smart Lite, Pro, EMS<br>and VideoWall  | Smart Lite, Pro,<br>EMS and VideoWall   | Smart Lite, Pro, EMS and VideoWall  | Smart Lite, Pro, EMS and VideoWall                                       | Smart Lite, Pro, EMS and VideoWall                                      |
| MOBILE SOFTWARE             | S_REMOTE IOS   | S_REMOTE IOS   | S_REMOTE IOS  | S_REMOTE IOS   | S_REMOTE IOS  | S_REMOTE IOS   | S_REMOTE IOS   | S_REMOTE IOS   | S_REMOTE IOS  | S_REMOTE IOS  | S_REMOTE IOS   | S_REMOTE IOS  |
| SIMULTANEOUS<br>CONNECTIONS | 6 (plus 4 via<br>WebServer)  | 6 (plus 4 via<br>WebServer)  | 6 (plus 4 via<br>WebServer)   | 6 (plus 4 via<br>WebServer)  | 6 (plus 4 via<br>WebServer)   | 6 (plus 4 via<br>WebServer)  | 6 (plus 4 via<br>WebServer)  | 6 (plus 4 via<br>WebServer)  | 6 (plus 4 via<br>WebServer)   | 6 (plus 4 via<br>WebServer)   | 6 (plus 4 via<br>WebServer)  | 6 (plus 4 via<br>WebServer)   |



# SMART CONTROL SOFTWARE

#### SMARTCONTROL LITE SOFTWARE

Software for single site viewing of Smart range of products



#### **SMARTCONTROL LITE SOFTWARE**

Software for single site viewing of Smart range of products

Note - Supplied FREE OF CHARGE with Smart Transmission units.

Smartcontrol Lite - Easy to use software when only a single site is to be monitored at any one time with or without alarm events. Remote operation of the Smart range, including audio for 2 way communication, alarm dial up verification options and full PTZ control of the remote cameras.

## SMARTCONTROL PRO SOFTWARE

VLS-CPRO

0252090

Software for multi-site viewing up to 21 sites simultaneously, 1 user licence USB dongle



#### SMARTCONTROL PRO SOFTWARE

SmartControl Pro - When multiple sites are required to be monitored simultaneously with or without alarms. Remote operation of the Smart range, including audio for 2 way communication, alarm dial up verification options and full PTZ control of the remote cameras.

## SMARTCONTROL SOFTWARE DEVELOPMENT KIT

VLS-SVSS

0399360

SmartVideo server software SDK



# SMART VIDEOWALL SOFTWARE

0495930

#### **SMART VIDEOWALL SOFTWARE**

VLS-VW

Videowall software for connection of up to 64 cameras simultaneously



## **SMART VIDEOWALL**

#### KEY FEATURES - SMART VIDEO WALL SOFTWARE

## DISPLAYS OF UP TO 64 LIVE VIDEO ON UP TO 4 MONITORS

This powerful software will allow the operator to view up to 64 live video feeds, giving up to 16 images per monitors

The Smart VideoWall software will allow the operator to connect one camera from each of 64 separate transmitters simultaneously

## 4 VIRTUAL MONITORS WITH INDIVIDUAL LAYOUT PROFILES

An operator can easily view both the most critical and most popular screen profiles using the Smart VideoWall's software

The software offers intuitive control and operation of PTZ cameras automatically detecting which cameras are suitable and presenting an on-screen navigation tool

#### **RELAY CONTROL**

The operator using the on screen switches can trigger site relays

# ONLINE EVALUATION SMARTDISC ARCHIVE AND SMARTTEL PRE-

As well as live images, the operator can recall archived images from any of the connected SmartDisc devices as well as the prealarm images from SmartTel devices

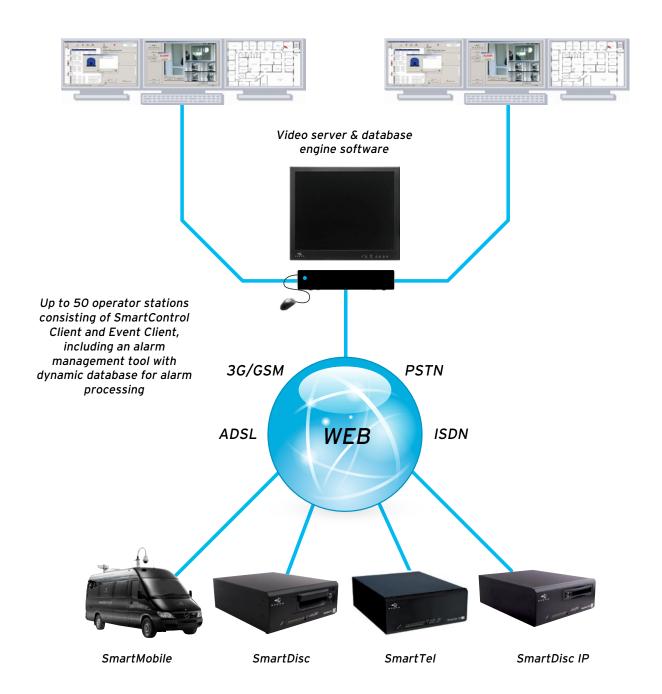


# **MANAGEMENT RECEIVING SOFTWARE - EMS**

#### **VIDEO EVENT MANAGEMENT SOFTWARE - EMS**

| VLS-CSER  | 0496130 | Server software and MySQL PRO license database engine for use with Smart  |
|-----------|---------|---|
|           |         | range of products, up to 50 operator station clients available separately |
| VLS-CCLNT | 0262330 | Client software, up to 50 per VLS-CSER                                    |

### VISTA SMART ADVANCED EVENT MANAGEMENT SYSTEM (VLS-EMS)





# MANAGEMENT RECEIVING SOFTWARE - EMS

# **KEY FEATURES - MANAGEMENT RECEIVING**

#### QUAD ALARM WINDOW

Each segment shows a different image around the alarm activation providing an invaluable tool for detecting the true cause of an alarm

#### EVENT HANDLING SCREEN

This screen displays all information relating to the status of new alarms and can be viewed as free text or picked from a list of standard, pre-determined responses, providing alarm specific action plans on customer, location and transmitter

#### SERVER/CLIENT ARCHITECTURE

Although this is a multiple operator system there is a central database for single point of data entry, with configurable client operator rights allowing for decentralised maintenance of the master database

#### INTERACTIVE SITE MAPS

These maps allow the operator to track the intruder around the site by location rather than just camera name and number

#### **REPORTING**

The full reporting package provides information on, user activities, user specific entries, total number of alarm activations, response time to alarms and total alarm handing time per call. Also included are the full database search, customised analysis of events and archived video recordings

# **MOBILE VIEWING**



# SMARTPHONE AND PDA USING **SMARTVIEW SOFTWARE**

#### **S REMOTE**



iPAD, iPHONE AND iPOD TOUCH **USING IPHONE APPLICATION** 

Live video transmission, camera switching and 4-step adjustment of image quality for higher frame rate Video archive evaluation with search criteria (date, time or event)

> Transmission of up to 10 ips Remote control of PTZ systems (pan, tilt, zoom) Remote control of relays (e.g. lights, barriers, doors) Adding, editing and deleting of transmitter list entries Simple installation and intuitive operation Communication: GPRS, UMTS/3G, HSDPA. WLAN with iPod touch The SmartControl iPhone software is available via the App Store (iTunes)



# **CAMERAS**

#### **VNPR CAMERAS**

| VNPRC6e  | 0446350 | 6m range VNPR camera, black, 30W, 12VDC, wall bracket included, requires PSU  |
|----------|---------|---|
| VNPRC12e | 0446360 | 12m range VNPR camera, black, 30W, 12VDC, wall bracket included, requires PSU |
| VNPRC18e | 0446370 | 18m range VNPR camera, black, 30W, 12VDC, wall bracket included, requires PSU |
| VNPRC25e | 0446380 | 25m range VNPR camera, black, 30W, 12VDC, wall bracket included, requires PSU |
| VNPRC35e | 0446390 | 35m range VNPR camera, black, 30W, 12VDC, wall bracket included, requires PSU |

#### VNPR CAMERAS WITH TRUE DAY/NIGHT OVERVIEW

| VNPRCD12e | 0446400 | 12m range VNPR camera with true day/night overview camera, black, 30W,        |
|-----------|---------|---|
|           |         | 12VDC, wall bracket included, requires PSU                                    |
| VNPRCD18e | 0446410 | 18m range VNPR camera with true day/night overview camera, black, 30W,        |
|           |         | 12VDC, wall bracket included, requires PSU                                    |
| VNPRCD25e | 0446420 | 25m range VNPR camera with true day/night overview camera, black, 30W, 12VDC, |
|           |         | wall bracket included, requires PSU   |
| VNPRCD35e | 0446430 | 35m range VNPR camera with true day/night overview camera, black, 30W, 12VDC, |
|           |         | wall bracket included, requires PSU   |



### **VNPR WITHOUT OVERVIEW CAMERA**

### **VNPR WITH OVERVIEW CAMERA**

#### **KEY FEATURES - VNPRC RANGE**

Camera and LED shuttering matched to provide 98% capture reliability for legal retro-reflective number plates

Years of problem-free operation allows the operator to fit and forget

## COMPLETE RANGE

Comprehensive range caters for vast majority of circumstances

#### AESTHETIC DESIGN

Modern, sleek design makes them suitable for wide variety of applications

### DAY/NIGHT OVERVIEW CAMERA

Guaranteed excellent picture quality, whatever the lighting conditions

## FACTORY PRESET

Units are supplied pre-configured for quick and easy installation



# **CAMERAS & ACCESSORIES**

0472060

#### **BRACKETS**

VNPRBOLLARD15

| VNPRCCMe        | 0457060 | Ceiling mount for VNPRCe range                          |
|-----------------|---------|---|
| VNPRCPAe        | 0456880 | Pole side mount for VNPRCe range                        |
| VNPRCTMe        | 0457050 | Tower mount for VNPRCe range                            |
|                 |         |   |
| VNPR PSU        |         |   |
| VNPRCPSUe       | 0446440 | Power supply for VNPRCe range                           |
|                 |         |   |
| VNPR BOLLARD CA | MERAS   |   |
| VNPRBOLLARD5    | 0470220 | 3-5m range VNPR camera, stainless steel, 1150W, 240VAC  |
| VNPRBOLLARD7    | 0470230 | 5-7m range VNPR camera, stainless steel, 1150W, 240VAC  |
| VNPRBOLLARD10   | 0470240 | 7-10m range VNPR camera, stainless steel, 1150W, 240VAC |
|                 |         |   |

10-15m range VNPR camera, stainless steel, 1150W, 240VAC

## KEY FEATURES - VNPR BOLLARD RANGE

#### EXCELLENT PERFORMANCE

Camera and led shuttering matched to provide 98% capture reliability for legal retro-reflective number plates

Years of problem-free operation allows the operator to fit and forget

### COMPLETE RANGE

Comprehensive range caters for vast majority of circumstances

#### **AESTHETIC DESIGN**

Modern, sleek design makes them suitable for wide variety of applications

#### DAY/NIGHT OVERVIEW CAMERA

Guaranteed excellent picture quality, whatever the lighting conditions

## FACTORY PRESET

Units are supplied pre-configured for quick and easy installation





# **VNPR CAMERA COMPARISON CHART**

|                              | L         | MAX OF<br>30° & HEIGHT | GE     | IM | AGES PI | ER/SEC | (IPS) R | EQUIRE | D AT X N | <b>ИРН</b> |
|------------------------------|-----------|------------------------|--------|----|---------|--------|---------|--------|----------|------------|
|                              | MOUNT     | MAX OF<br>30° & HE     | RANGE  | 5  | 10      | 20     | 30      | 50     | 70       | 100        |
| BOLLARD CAMERAS              |           |                        |        |    |         |        |         |        |          |            |
| VNPRBOLLARD5                 | Bollard   | Ground                 | 3-5m   | 10 | 25      | 50     |         |        |          |            |
| VNPRBOLLARD7                 | Bollard   | Ground                 | 5-7m   | 10 | 25      | 50     |         |        |          |            |
| VNPRBOLLARD10                | Bollard   | Ground                 | 7-10m  | 10 | 25      | 50     |         |        |          |            |
| VNPRBOLLARD15                | Bollard   | Ground                 | 10-15m | 10 | 25      | 50     |         |        |          |            |
| CAMERAS WITHOUT OVERVIEW     |           |                        |        |    |         |        |         |        |          |            |
| VNPRC6e                      | Wall/Pole | 2.4m                   | 3-6m   | 10 | 25      | 50     |         |        |          |            |
| VNPRC12e                     | Wall/Pole | 5.8m                   | 7-12m  | 10 | 10      | 25     | 25      | 50     |          |            |
| VNPRC18e                     | Wall/Pole | 6.5m                   | 11-18m | 5  | 10      | 10     | 10      | 10     | 10       | 25         |
| VNPRC25e                     | Wall/Pole | 12m                    | 14-25m | 5  | 5       | 10     | 10      | 10     | 25       | 50         |
| VNPRC35e                     | Wall/Pole | 16.5m                  | 23-35m | 5  | 5       | 10     | 10      | 10     | 25       | 50         |
| CAMERAS WITH<br>TDN OVERVIEW |           |                        |        |    |         |        |         |        |          |            |
| VNPRCD12e                    | Wall/Pole | 5.8m                   | 7-12m  | 10 | 10      | 25     | 25      | 50     |          |            |
| VNPRCD18e                    | Wall/Pole | 6.5m                   | 11-18m | 5  | 10      | 10     | 10      | 10     | 10       | 25         |
| VNPRCD25e                    | Wall/Pole | 12m                    | 14-25m | 5  | 5       | 10     | 10      | 10     | 25       | 50         |
| VNPRCD35e                    | Wall/Pole | 16.5m                  | 23-35m | 5  | 5       | 10     | 10      | 10     | 25       | 50         |

The maximum angle from camera to number plate is 30°. This is taken at the shortest point i.e. for a VNPRC25 this is 30° @ 14m

If a car is travelling at 10mph, and the camera is sited 25m away, then the PC will have to capture at least 5ips

|           |         |                                 | Max VNPR Cams | Max Overview Cams | Traffic Speed   |
|-----------|---------|---------------------------------|---------------|-------------------|-----------------|
| VNPR111Le | 0310350 | 1 Lane PC controller & software | 1             | 1                 | Barrier / 10mph |
| VNPR211Le | 0310360 | 2 Lane PC controller & software | 2             | 2                 | Barrier / 10mph |
| VNPR311Le | 0472600 | 3 Lane PC controller & software | 3             | 3                 | Barrier / 10mph |
| VNPR411Le | 0472610 | 4 Lane PC controller & software | 4             | 4                 | Barrier / 10mph |

Each VNPR controller is supplied with a PC, keyboard, mouse & relevant lane software

NOTE - FOR ANY VNPR REQUIREMENT OUTSIDE THE SPECIFICATIONS ABOVE PLEASE CONTACT US.



# **VNPR LITE CONTROLLER FEATURES**

| Application   | Module   | Lite                         | Protos                           | Protos Server                    |
|---------------|--|------------------------------|----------------------------------|----------------------------------|
| Аррисатоп     | JetBase Live   | Yes                          | Yes                              | Yes                              |
|               | Remote Alarms  | No                           | Requires dongle +<br>Vistawatch* | Requires dongle +<br>Vistawatch* |
|               | SMS  | No                           | Yes with additional modem*       | Yes with additional modem*       |
|               | Email  | No                           | Yes                              | Yes                              |
|               | Hotlists   | No                           | Yes                              | Yes                              |
|               | FastTrack  | N/A                          | N/A                              | N/A                              |
|               | JetBOF / BOF2  | No                           | Available on request*            | Available on request*            |
|               | Car park Counting / Roll Call                                    | No                           | Yes                              | Yes                              |
|               | Frequent Visitors  | Yes                          | Yes                              | Yes                              |
| LIVE          | SkiData / Designa / Zeag / WPS carparking                        | No                           | Available on request*            | Available on request*            |
|               | LiveNet  | Yes                          | Yes                              | Yes                              |
|               | TCP/IP Sockets   | N/A                          | N/A                              | N/A                              |
|               | Web Services   | N/A                          | N/A                              | N/A                              |
|               | DVR  | Yes                          | Yes                              | Yes                              |
|               | LED Sign   | Yes                          | Yes                              | Yes                              |
|               | Matrix Control   | N/A                          | N/A                              | N/A                              |
|               | Proximity Card   | N/A                          | N/A                              | N/A                              |
|               | Temporary Visitor  | Yes                          | Yes                              | Yes                              |
|               | Hide Live Video  | No                           | Yes                              | Yes                              |
|               | NAAS Recording   | No                           | No                               | No                               |
|               | Enforcement  | •                            | -                                | -                                |
|               | JetBase Review   | Yes                          | Yes                              | Yes                              |
|               | Auto Search  | Yes                          | Yes                              | Yes                              |
|               | Overstay   | No                           | Yes                              | Yes                              |
| REVIEW        | Analysis   | Yes                          | Yes                              | Yes                              |
|               | Log Purging  | Yes                          | Yes                              | Yes                              |
|               | JTMS   | No                           | Yes                              | Yes                              |
|               | SQL Log  | Yes with VistaOnline option* | Yes with VistaOnline option*     | Yes with VistaOnline<br>Option*  |
| LIVE/REVIEW   | Appearance   | Yes                          | Yes                              | Yes                              |
|               | Directories  | Yes                          | Yes                              | Yes                              |
|               | Skins  | Yes                          | Yes                              | Yes                              |
| DATABASE      | JetDbSrv   | Yes                          | Yes                              | Yes                              |
|               | Database options   | Yes                          | Yes                              | Yes                              |
| MOBILE        | JetMobile  | N/A                          | N/A                              | N/A                              |
|               | GPS Mapping  | N/A                          | N/A                              | N/A                              |
|               | JetWatch   | Yes                          | Yes                              | Yes                              |
| MISC APPS     | JetCam   | *                            | *                                | *                                |
|               | JetOnline  | Optional*                    | Optional*                        | Optional*                        |
|               | Stream IN (server/mirror)  | No                           | No                               | Yes                              |
| STREAM        | Stream OUT (server/client)                                       | Yes                          | Yes                              | N/A                              |
|               | Remote Log Viewer  | No<br>                       | No<br>                           | No<br>                           |
|               | Relay Server   | No                           | No                               | No                               |
|               | Input System Details   | Yes                          | Yes                              | Yes                              |
|               | Relays (Barriers)  | Yes                          | Yes                              | Yes                              |
|               | Scarab / Beetle  | N/A                          | N/A                              | N/A                              |
| ANPR ENGINE   | XML Export   | No                           | No<br>No                         | No<br>No                         |
|               | GPS Unit   | No                           | No                               | No                               |
|               | Network Interface (other than<br>SimpleXML, which isn't dongled) | No                           | Yes                              | Yes                              |
|               | Allow disabled lanes   | N/A                          | N/A                              | N/A                              |
| DETECT ENGINE | Speed  | No                           | No                               | No<br>No                         |
|               | VMD  | No                           | Yes                              | N/A                              |
| ar            | VR Make / Model / Size   | No                           | No                               | N/A                              |
| SPECIALS      | Open History File (Review)                                       | Yes                          | Yes                              | Yes                              |
| GRABBERS      | JetGrab  | Yes                          | Yes                              | N/A                              |
|               | DirectX  | Yes                          | Yes                              | N/A                              |
|               | JetHD01  | No                           | Yes                              |                                  |
|               | JetHDOV01  | No                           | No                               |                                  |
| IP CAMERAS    | Hippo  | No                           | No                               |                                  |
|               | Fox-iHD  | N/A                          | N/A                              |                                  |
|               | IndigoVision   |                              |                                  |                                  |



NOTE - DUE TO THE SOMETIMES COMPLEXITY OF A PARTICULAR PROJECT, WE OFFER A DESIGN SERVICE AND FREE SITE SURVEY IF REQUIRED FOR OUR VNPR EQUIPMENT. A VNPR SITE SURVEY GUIDE IS PROVIDED AT THE BACK OF THIS CATALOGUE. PLEASE CONTACT YOUR LOCAL SALES OFFICE IF YOU REQUIRE ASSISTANCE.



# **VNPR PC & SOFTWARE**

#### **VNPR LITE CONTROLLERS**

| VNPR111Le | 0310350 | 1 lane VNPR PC with software, requires PC screen |
|-----------|---------|--|
| VNPR211Le | 0310360 | 2 Iane VNPR PC with software, requires PC screen |
| VNPR311Le | 0472600 | 3 lane VNPR PC with software, requires PC screen |
| VNPR411Le | 0472610 | 4 Iane VNPR PC with software, requires PC screen |

#### **VNPR LITE SERVER CONTROLLER**

| VNPRSERVERLITE | 0472680 | Server for network connection up to 5 VNPR clients |
|----------------|---------|--|





ANALSYIS OF RECORDED DATA CAN BE CARRIED OUT SUCH AS FREQUENCY OF ENTRIES, CAR PARK OVERSTAY, SPEED BETWEEN POINTS



# **VNPR MISCELLANEOUS**

#### REMOTE SOFTWARE

| VistaOnline Exp    | 0442440 | Single user dial up software |
|--------------------|---------|------------------------------|
| VistaOnline Exp +1 | 0442450 | Dual user dial up software   |
| VistaOnline Exp +2 | 0442460 | Three user dial up software  |

Please note: The Vista online remote software needs to be included when ordering the Vista VNPR controllers & is not retrofit

## **AIRPORT SECURITY**



## **PETROL STATIONS**



#### MANAGING CAR PARKS



#### AIRPORT SECURITY



## MAINTENANCE (after 1st year warranty when NEW)

| VNPR2SSU03104202 Lane annual software maintenanceVNPR3SSU03104303 Lane annual software maintenanceVNPR4SSU03104404 Lane annual software maintenance | VNPR1SSU | 0310410 | 1 Lane annual software maintenance |
|---|----------|---------|------------------------------------|
|   | VNPR2SSU | 0310420 | 2 Lane annual software maintenance |
| VNPR4SSU 0310440 4 Lane annual software maintenance   | VNPR3SSU | 0310430 | 3 Lane annual software maintenance |
|   | VNPR4SSU | 0310440 | 4 Lane annual software maintenance |

### **ACCESSORIES**

| VNPRCOMM  | 0098330 | Site commissioning cost per day |
|-----------|---------|---------------------------------|
| VNPRTRAIN | 0098320 | Training on VNPR cost per day   |

VNPR



# **VNPR BASIC SYSTEM DESIGN**

DIAGRAM ILLUSTRATING THE LAYOUT OF A SIMPLE 1 LANE VNPR SYSTEM

### **Equipment Required:**

VNPR Camera - Bollard or wall/pole mounted with or without overview camera. Wall/pole mounted camera requires mounting bracket or pole and power supply

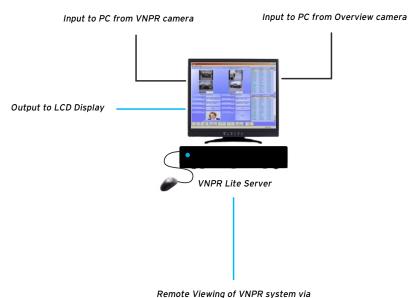
Single Lane VNPR Lite Controller LCD Monitor - To view output from PC **Optional LCD Information Display** 

Optional VistaOnline Remote dial up software. If required must be requested when ordering Vista Lite Controller, not retrofit.



Norbain offer a free design service with the configuration of your VNPR System. Please contact us for assistance with your requirements.

A system can be as simple as a single lane installation to the most complex of systems with multiple lanes or traffic. Control can be locally via a single control position or a multi client/ server network.

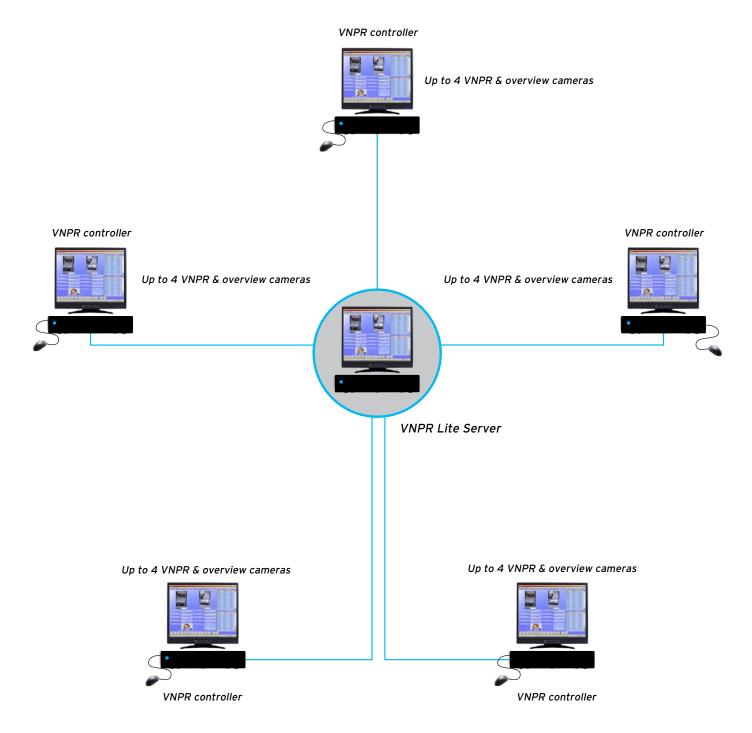




# **VNPR LITE NETWORKED SYSTEM DESIGN**

DIAGRAM ILLUSTRATING THE LAYOUT OF A CLIENT/SERVER NETWORKED VNPR SYSTEM

Client - VNPR Lite Controller available to monitor up to 4 lanes. Each lane can also have an overview camera. VNPR Lite Server - For connection of up to 5 VNPR Lite Controllers (clients) maximum. The server is used to connect all the remote clients together and the main database of the system is stored on the server.





# **POWER SUPPLIES**

|   |   | _ | _  | ь. |   |    |    |   | -   | $\overline{}$ |
|---|---|---|----|----|---|----|----|---|-----|---------------|
| ш | N |   | ь. | н. | N | ΙΔ | 17 | W | 11) | ( '           |
|   |   |   |    |    |   |    |    |   |     |               |

| VPSU500/12   | 0098250 | 12VDC, 500mA regulated, 2.1mm DC jack, non-plugged, encapsulated, 94x26.5x46mm    |
|--------------|---------|---|
| VPSU500/12P  | 0471490 | 12VDC, 500mA regulated, 2.1mm DC jack, UK plugged, encapsulated, 94x26.5x46mm     |
| VPSU1000/12  | 0098260 | 12VDC, 1A regulated, 2.1mm DC jack, non-plugged, encapsulated, 94x26.5x46mm       |
| VPSU2000/12N | 0098790 | 12VDC, 2A regulated, 2.1mm DC jack, non-plugged, encapsulated, 108x32x58mm        |
| VPSU12UNIV   | 0473270 | 12VDC, 5A, Universal PSU, for use with Quantum DVR, Monitors VFS-L/P/100/200/300, |
|              |         | supplied with 2.1mm plug and additional 2.5mm adaptor                             |

#### **EXTERNAL 12VDC**

| VPSU122EXT | 0496100 | 12VDC, 2A regulated, ABS, 158x89x78mm, IP66           |
|------------|---------|---|
| VPSU1241   | 0471520 | 12VDC, 4A regulated, ABS, 187.2x122x90mm, IP66        |
| VPSU1244   | 0471510 | 12VDC, 4 x 1A regulated, ABS, 187.2x122x90mm, IP66    |
| VPSU1248   | 0471500 | 12VDC, 8 x 500mA regulated, ABS, 187.2x122x90mm, IP66 |

### **INTERNAL 24VAC**

| VPSU24VAC/750  | 0258930 | 24VAC, 750mA, non-plugged, encapsulated, 80x55x48mm  |
|----------------|---------|--|
| VPD-PSU1e      | 0396160 | 24VAC, 1.5A, non-plugged, encapsulated, 85x66x54.7mm |
| VPSU24VAC/2000 | 0258940 | 24VAC, 2A, non-plugged, encapsulated, 80x55x48mm     |
| VPSU24VAC/3000 | 0271770 | 24VAC, 3A, non-plugged, encapsulated, 100x65x72mm    |

#### **EXTERNAL 24VAC**

| EXTERNAL LAVAC |         |   |
|----------------|---------|---|
| VPSU243EXT     | 0496080 | 24VAC, 3A, ABS, 158x89x78mm, IP66       |
| VPSU2441       | 0472030 | 24VAC, 4A, ABS, 240x191x107mm, IP66     |
| VPSU245EXT     | 0496090 | 24VAC, 5A, ABS, 207x122x90mm, IP66      |
| VPSU247EXT     | 0471060 | 24VAC, 7A, ABS, 207x122x90mm, IP66      |
| VPSU2444       | 0472040 | 24VAC, 4 x 1A, ABS, 240x191x107mm, IP66 |



**VPSU500/12** (0098250)



VPSU2000/12N (0098250)



**VPSU1241** (0471520)



VPSU24VAC/2000 (0258940)



**VPSU243EXT** (0496080)



VPSU245EXT (0496090)

# MISCELLANEOUS



| IP RATING                  |                         |                         |                         |              |               | 99                 | 99                 | 99                 | 99                 |                |               |              |                |                |                | 99                 | 99                 | 99                 | 99                 | 99                 | 99                 |
|----------------------------|-------------------------|-------------------------|-------------------------|--------------|---------------|--------------------|--------------------|--------------------|--------------------|----------------|---------------|--------------|----------------|----------------|----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| OUTPUT CABLE / CONNECTIONS | 1.8m Cable & 2.1mm jack | 1.8m Cable & 2.1mm jack | 1.8m Cable & 2.1mm jack | 1.8m Cable   |               | 1 x Fused terminal | 1 x Fused terminal | 4 x Fused terminal | 8 x Fused terminal |                | 180mm Cable   | 1 x Terminal | 180mm Cable    | 180mm Cable    |                | 1 x Fused terminal | 4 x Fused terminal | 8 x Fused terminal |
| INPUT CABLE/CONNECTIONS    | 1.9m Cable              | 1.9m Cable              | 1.9m Cable              | 1.9m Cable   |               | Fused terminal     | Fused terminal     | Fused terminal     | Fused terminal     |                | 1.9m Cable    | 1.7m Cable   | 1.9m Cable     | 1.9m Cable     |                | Fused terminal     |
| CABLE ENTRY                |                         |                         |                         |              |               | 2 x gland          | 2 x gland          | 2 x gland          | 2 x gland          |                |               |              |                |                |                | 2 x gland          |
| DIWENZIONZ (WW)            | 94x26.5x46              | 94x26.5x46              | 94x26.5x46              | 108x32x58    |               | 158x89x78          | 187.2x122x90       | 187.2x122x90       | 187.2x122x90       |                | 80x55x48      | 85x66x54.7   | 80x55x48       | 100x65x72      |                | 158x89x78          | 207x122x90         | 207x122x90         | 207x122x90         | 207x122x90         | 240x191x107        |
| WEICHT                     | 150g                    | 150g                    | 150g                    | 2759         |               | 1.44kg             | 1.45kg             | 1.45kg             | 1.45kg             |                | 529g          | 920g         | 529g           | 1.3kg          |                | 1.44kg             | 2kg                | 1.71kg             | 1.71kg             | 2.1kg              | 3kg                |
| KONSTRUCTION               | Plastic                 | Plastic                 | Plastic                 | Plastic      |               | Plastic            | Plastic            | Plastic            | Plastic            |                | Plastic       | Plastic      | Plastic        | Plastic        |                | Plastic            | Plastic            | Plastic            | Plastic            | Plastic            | Plastic            |
| STU9TUO 10 oN              | 1 x 500mA               | 1 x 500mA               | 1×1A                    | 1×2A         |               | 1×2A               | 1×4A               | 4 × 1A             | 8 x 500mA          |                | 1 x 750mA     | 1×1.5A       | 1×2A           | 1 x 3 A        |                | 1 × 3 A            | 1×4A               | 1×5A               | 1×7A               | 4 × 1A             | 8 × 1A             |
| 30ATJOV TU9TUO             | 12VDC                   | 12VDC                   | 12VDC                   | 12VDC        |               | 12VDC              | 12VDC              | 12VDC              | 12VDC              |                | 24VAC         | 24VAC        | 24VAC          | 24VAC          |                | 24VAC              | 24VAC              | 24VAC              | 24VAC              | 24VAC              | 24VAC              |
| 39ATJOV TU9NI              | 110-240VAC              | 110-240VAC              | 110-240VAC              | 110-240VAC   |               | 230VAC             | 230VAC             | 230VAC             | 230VAC             |                | 230VAC        | 230VAC       | 230VAC         | 230VAC         |                | 230VAC             | 230VAC             | 230VAC             | 230VAC             | 230VAC             | 230VAC             |
| INTERNAL 12V DC            | VPSU500/12              | VPSU500/12P             | VPSU1000/12             | VPSU2000/12N | EXTERNAL 2VDC | VPSU122EXT         | VPSU1241           | VPSU1244           | VPSU1248           | INTERNAL 24VAC | VPSU24VAC/750 | VPD-PSU1e    | VPSU24VAC/2000 | VPSU24VAC/3000 | EXTERNAL 24VAC | VPSU243EXT         | VPSU2441           | VPSU245EXT         | VPSU247EXT         | VPSU2444           | VPSU2488           |

**POWER SUPPLIES** 



# **CABLE & CONNECTORS**

| U/ (DEE             |         |   |
|---------------------|---------|---|
| URM70/100           | 0037530 | 100m of URM70 standard core coaxial cable, black                                      |
| URM70/200           | 0037560 | 200m of URM70 standard core coaxial cable, black                                      |
| RG59/CCS/100        | 0480010 | 100m of RG59, copper coated steel core coax cable, suitable for video and telemetry u |
| NEW                 |         | to 150m, UV, LSF, black   |
| RG59/CCS/100W       | 0480130 | 100m of RG59, copper coated steel core coax cable, suitable for video and telemetry u |
| NEW                 |         | to 150m, white  |
| RG59/CCS/200        | 0480020 | 200m of RG59, copper coated steel core coax cable, suitable for video and telemetry   |
| NEW                 |         | up to 150m, UV, LSF, black  |
| RG59/CCS/500        | 0480030 | 500m of RG59, copper coated steel core coax cable, suitable for video and telemetry   |
| NEW                 |         | up to 150m, UV, LSF, black  |
| RG59/SCC/100        | 0480060 | 100m of RG59, solid copper core coax cable, suitable for video and telemetry up to    |
| NEW                 |         | 250m, UV, LSF, black  |
| RG59/SCC/200<br>NEW | 0480070 | 200m of RG59, solid copper core coax cable, suitable for video and telemetry up to    |
|                     |         | 250m, UV, LSF, black  |
| RG59/SCC/500        | 0480080 | 500m of RG59, solid copper core coax cable, suitable for video and telemetry up to    |
| NEW                 |         | 250m, UV, LSF, black  |
| RG59/SG5/100        | 0480090 | 100m of shotgun cable, RG59 copper coated steel core coax, 2 x 0.5mm power cores,     |
| NEW                 |         | suitable for video and telemetry up to 150m, UV, LSF, black                           |
| RG59/SG5/200        | 0480100 | 200m of shotgun cable, RG59 copper coated steel core coax, 2 x 0.5mm power cores,     |
| NEW                 |         | suitable for video and telemetry up to 150m, UV, LSF, black                           |
| RG59/SG75/100       | 0480110 | 100m of shotgun cable, RG59 copper coated steel core coax, 2 x 0.75mm power cores,    |
| NEW                 |         | suitable for video and telemetry up to 150m, UV, LSF, black                           |
| RG59/SG75/200       | 0480120 | 200m of shotgun cable, RG59 copper coated steel core coax, 2 x 0.75mm power cores     |
| NEW                 |         | suitable for video and telemetry up to 150m, UV, LSF, black                           |
| HDMi lead           | 0473430 | HDMi to HDMi lead 1.75m Gold plated conforms to HDMi1.3                               |

#### **CONNECTORS**

| COMMECTORS |         |  |
|------------|---------|--|
| VBNC       | 0442930 | VBNC BNC connector for RG59 & URM70                |
| VBNC100    | 0442940 | Box of 100 x BNC crimp connectors for RG59 & URM70 |

#### KEY FEATURES - RG59-SCC SOLID COPPER CORE COAX CABLE

#### GUARANTEED 100% PURE COPPER CONDUCTOR

The CCTV signal will travel 250m without significant attenuation

Control fully functional cameras from up to 250m away when used with a Quantum H.264 DVR

## EXCELLENT BRAIDING COVERAGE

Reduces susceptibility to external interference

#### CONSISTENCY OF SPECIFICATION

Guaranteed consistency between batches

Cable can be laid in external areas exposed to daylight, without deterioration or break-up over time

#### LOW, SMOKE & FUME

The cable is designed to minimise toxic fumes, should it be burnt





### **VIDEO DISTRIBUTION AMPLIFIERS**

| VVDA104     | 0346300 | 1 in x 4 out VDA, 6W, 230VAC, 216x240x44mm         |
|-------------|---------|--|
| VVDA204     | 0315900 | 2 in x 4 out or 1/8, VDA, 6W, 230VAC, 216x240x44mm |
| VVDA408     | 0315890 | 2 in x 4 out or 4/2, VDA, 6W, 230VAC, 216x240x44mm |
|             |         |  |
| ACCESSORIES |         |  |
| VVDA-DRM    | 0379990 | Single rack mount kit for VVDA units               |
|             |         |  |

### **TEST EQUIPMENT & TOOLS**

| HUMV       | 0472580 | Passive ground loop isolation transformer                                  |
|------------|---------|--|
| VTMO4C     | 0310580 | 4" colour test monitor with carry case                                     |
| VTMPRO     | 0472590 | Service test monitor, RS485, fibre optics tester, cable tester, multimeter |
| VCRIMPTOOL | 0495900 | Crimp tool for RG59  |
| VSTRIPTOOL | 0495910 | Stripping tool for RG59  |



**VVDA408** (0315890)



#### **KEY FEATURES - VIDEO DISTRIBUTION AMPLIFIERS**

#### QUALITY IMAGE REPRODUCTION

The VVDA range provides high quality signal reproduction to ensure that no loss of image quality is suffered upon video distribution. The VVDA408 model benefits from individual input linear gain, which amplifies weaker signals to the required output standard for high quality video. This is particularly useful for long

#### VIDEO LOSS DETECTION

The operator is immediately notified of any loss of video signal, allowing prompt action to be taken

#### FLEXIBLE INPUT/OUTPUT OPTIONS

Installers can choose between 1, 2 & 4 video inputs and with 2, 4 &8 video outputs, allowing flexible configuration of units to suit site specific requirements

### EASY TO INSTALL AND SET-UP

A series of very simple steps makes the unit very easy to integrate into virtually any system

### **KEY FEATURES - VTMPRO**

### MULTI PROTOCOL TELEMETRY OUTPUT

With over 20 different manufacturers telemetry protocols installed, the VTMPRO can test and control the vast majority of domes on the market

#### CAT5E CABLE TESTER

A significant number of CCTV installations are now fed over Cat5e cable, this built in tester allows the confirmation of cable continuity and correct wiring configuration

Up to 12 hours continuous use can be achieved from a 3 hour charge, allowing the engineer to operate all day without time consuming recharging

#### FIBRE OPTIC SIGNAL STRENGTH METER

The inclusion of the Fibre Optic Signal strength meter means that even on the most advanced systems, engineers will have the ability to test and identify where faults might be

#### DVM DIGITAL VOLT METER

The inclusion of the Digital Volt Meter means that all an engineer requires for testing, fault finding and commissioning is included in one handy robust unit

# MISCELLANEOUS



### **LOCKABLE BOXES**

| QBOX               | 0473150 | Single lock box digital recorder, 550x550x150mm         |
|--------------------|---------|---|
| VLBMUX             | 0093090 | Dual lock box digital recorder c/w shelf, 560x500x215mm |
|                    |         |   |
|                    |         |   |
| ACCESSORIES        |         |   |
| ACCESSORIES VLBK/B | 0445870 | Key & barrel for VLBMUX                                 |



### **KEY FEATURES - QBOX**

### HINGED TOP AND FRONT

Allows easy access for installation and maintenance

#### ROBUST STEEL CONSTRUCTION

Provides a safe secure enclosure for the heart of the CCTV system

#### TOP AND SIDE VENTILATION HOLES

Ensures the cool running of the DVR

Allows the box to be secured to the surface it is sitting on, increasing the security of the installation



# SUB INDEX



### **TECHNICAL GUIDES AND SALES TOOLS**

### **BRACKET GUIDES**

Dome Bracket Charts Monitor Bracket Charts

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# BRACKET CONFIGURATORS



|                                 | VFD<br>Internal use only                  | VFDA<br>VK2-VFD<br>Internal use only  | VVRD, VK2-VRD, VPL7-WP-SM<br>VK2-600PTZ<br>Internal or external use only                                      |
|---------------------------------|---|---|---|
|                                 |   |   | 5   |
| SOLID CEILING<br>MOUNT          | Dome is surface mount as standard         | Dome is surface mount as standard   | SPACER (0497160)  Spacer can be used to hide connections  |
| FALSE CEILING<br>MOUNT          | -   | -   | VPL-SM-FM<br>(O497090)<br>False Ceiling kit for use<br>with the VPL7-WP-SM<br>only                            |
| WALL MOUNT                      | VFDS-IWMB/W or VFDS-IWMB/B (0444930)      | -   | VVRD-EWMB1 VRD-EWMB VPL-EWMB/PSU (0479030) (0498930) (0442910) or or or Not for use with VK2-600PTZ (0442910) |
| CORNER MOUNT                    | -   | -   | VRD-EWMB + VDM-ECMA (0498930) + (0457230)   |
| PENDANT FIXED<br>LENGTH         | VFDS-IPMB/W<br>(0155090)<br>1500mm length | -   | VRD-EPMB<br>(0498940)<br>500mm length   |
|                                 | VDM-IPMCA<br>(0276270)<br>Ceiling Adaptor | or<br>VDM-2MP<br>(0276240)<br>2m Pole   | VDM-IPMGA<br>(0291100)<br>Girder Adaptor  |
| PENDANT<br>ADJUSTABLE<br>LENGTH | Depending  VFDS-IPMA (0300860)  Adaptor   | on the length required another VDM-2MP can be u<br>VDM-C 0276250 coupler is required  VFDA only VFDA-IPMA (0499140) Adaptor  VFDA-IPMA Adaptor  Adaptor | vPL-IPMA<br>(O291180)<br>Adaptor  |
| SIDE POLE MOUNT                 | -   | -   | VRD-EWMB + VDM-EPMAg (0498930) + (0457240) → ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴                              |
| SWAN NECK                       | -   | -   | VRD-TM<br>(049895)  |

All brackets are RAL7035 (cool grey) unless otherwise stated

# BRACKET CONFIGURATORS



|                              | VPL600eco<br>Internal use only                                | Eclipse2, Eclipse2X<br>Internal & external use | VPL7-WP-PM<br>Internal & external use                           | Powerdome<br>Internal & external use   | VK2-1080PTZ<br>VK2-1080PTZHSG<br>required for all external and |
|------------------------------|---|--|---|--|--|
|                              | 60  |  | -   |  | bracket mount options  |
| SOLID CEILING MOUNT          | SPACER (0497160)<br>Spacer can be used to hide<br>connections | -  | Use VPL7-WP-SM  | Use VPP Surface<br>Mount Range   | Dome is surface mount<br>as standard                           |
| FALSE CEILING MOUNT          | The dome can be either surface or flush mount as standard     | Eclipse2-FM<br>(0498090)                       | Use VPL7-WP-SM  | Use VPP False Ceiling Mount<br>Range   | VK2-1080PTZICM<br>(0498730)                                    |
| WALL MOUNT                   | VVRD-EWMBI<br>(0479030) c                                     | VRD-EWMB<br>(0498930)                          | VPL-EWMBe<br>(0498960)  | VPP-EWMB<br>(0452100)  | VPL-EWMBe<br>(0498960)   |
| CORNER MOUNT                 | -   | VRD-EWMB + VDM-ECMA (0498930) + (0457230)      | VPL-EWMBe<br>(0498960) + VDM-ECMA<br>(0457230)                  |  | WMBe + VDM-ECMA (0457230)                                      |
| PENDANT FIXED LENGTH         | VRD-EPMB<br>(0498940)<br>500mm length                         |  | I   | 250mm VPP-IPMB250 (C<br>or<br>500mm VPP-IPMB500 (C<br>or<br>1000mm VPP-IPMB1000 (<br>or<br>2000mm VPP-IPMB2000 ( | )472180)<br>)472190)   |
|                              | VDM-IPMCA<br>(0276270)<br>Ceiling Adaptor                     |  | or  |  | VDM-IPMGA<br>(0291100)<br>irder Adaptor                        |
| PENDANT ADJUSTABLE<br>LENGTH |   |  | th required another VDM-2MP c<br>-C 0276250 coupler is required |  | <b>-</b>   |
|                              | VPL-IPMA<br>(029180)<br>Adaptor                               | -  |   | n<br>1   | VPP-IPMA<br>(0472160)<br>Adaptor                               |
| SIDE POLE MOUNT              | -   | VRD-EWM<br>(0498930) + VDM-EPMAg<br>(0457240)  | VPL-EWMBe (0498960) + VDM-EPMAg (0457240)                       |  | WMBe + VDM-EPMAg (0457240)                                     |
|                              |   |  |   | 1  | $\neg \rightarrow \langle c \rangle$                           |
| SWAN NECK                    | -   | VRD-TM<br>(0498950)                            |   | VPP-TM<br>(0470440)  |  |

All brackets are RAL7035 (cool grey) unless otherwise stated

# BRACKET CONFIGURATORS



| FLUSH FIT                    | VESA 75/100mm up to 15kg  VESAWM (0498620)  | VESA<br>5/100/200mm<br>up to 30kg<br>VESA200<br>(0444040)  |  |
|------------------------------|---|--|--|
| TILT & TURN                  | VESA 75/100mm up to 15kg  VESAWMPT (0498630)  | VESA 75/100mm up to 15kg  VESAWMPTE (0498640) Extended Wall Brace  | ket  |
| FIXED LENGTH                 | Pendant - Fixed Length VFSM/VESACB (0093650) Black  VFSM/VESACC (0098100) Cream  Pendant/Wall - Fixed Length VFSM/VESA/WC (0096570) Black | I meter dro  | pp   |
| PENDANT<br>ADJUSTABLE LENGTH | LCD-IPMCA (0251750) Ceiling Adaptor  If a size greater  VESAPA1 (0264980) Adaptor   | VCBDEL2M (0092210) 2m Chrome Pole  than 2m is required purchase another 2m pole coupler provided to join together  or  + | LCD-IPMGA (0291100) Girder Adaptor  and use the  VESAPA2 (0339530) Adaptor |

All brackets are Black unless otherwise stated



### TELEMETRY PROTOCOL GUIDE

|                             |                     |                 | itrol I           | Equip             |                | it             |   | Camera or Dome |             |             |             |                 |             |           |                     |               |
|-----------------------------|---------------------|-----------------|-------------------|-------------------|----------------|----------------|---|----------------|-------------|-------------|-------------|-----------------|-------------|-----------|---------------------|---------------|
| FSK (up the coax) Protocols | Quantum EVO non DVD | Quantum EVO DVD | Quantum Plus 960H | Quantum Xtra 960H | VKBD1 Keyboard | VKBD4 Keyboard |   | VPC5-700DNS    | VPC5-704DNS | VZM22INT600 | VZMZ2EXT600 | VVRD28V12DN-650 | VVRD22ZM600 | VPL600eco | Powerdome Lite VPL7 | Powerdome Pro |
| Vista                       |                     | •               | •                 | •                 |                |                |   |                |             |             |             |                 |             |           | •                   | •             |
| BBV                         |                     |                 |                   |                   |                |                |   |                |             |             |             |                 |             |           |                     | •             |
| Pelco                       |                     |                 | •                 | •                 |                |                |   |                |             |             |             |                 |             |           |                     | •             |
| RS485 Protocols             |                     |                 |                   |                   |                |                | • |                |             |             |             |                 |             |           |                     |               |
| Vista                       | •                   | •               | •                 | •                 | •              | •              |   | •              | •           | •           | •           | •               | •           | •         | •                   | •             |
| Pelco D                     | •                   | •               | •                 | •                 | •              |                |   | •              | •           | •           | •           | •               | •           | •         | •                   | •             |
| Pelco P                     | •                   | •               | •                 | •                 | •              | •              |   | •              | •           | •           | •           | •               | •           | •         | •                   | •             |
| AD Manchester               |                     |                 |                   |                   |                |                |   |                |             |             |             |                 |             |           |                     | •             |
| Philips                     |                     |                 |                   |                   |                |                |   |                |             |             |             |                 |             |           |                     | •             |

Note - The Vista Powerdome Pro will control Vista FSK & Vista, Pelco P & D RS485 protocols as standard. If another protocol is required as listed above then an optional PCB is

### **WINDOWS SOFTWARE & MOBILE DEVICES**

|                                 |                          | WINDOWS<br>XP | WINDOWS<br>7 | WINDOWS<br>8 |
|---------------------------------|--------------------------|---------------|--------------|--------------|
|                                 | QuantumEvo Client        | ~             | ~            | <b>✓</b>     |
|                                 | QuantumPlus<br>Client    | ~             | ~            | ~            |
|                                 | QuantumXtra<br>Client    | ~             | ~            | ~            |
| CI: I                           | Quantum QCMS             | ~             | ~            | <b>✓</b>     |
| Software                        | SmartControl Lite        | ~             | ~            | <b>✓</b>     |
|                                 | SmartControl Pro         | ~             | ~            | <b>✓</b>     |
|                                 | Smart Videowall          | <b>~</b>      | <b>✓</b>     | <b>✓</b>     |
| Client<br>Software              | Smart EMS                | <b>~</b>      | ~            | <b>✓</b>     |
|                                 | VK2 Client               |               | <b>✓</b>     | <b>✓</b>     |
|                                 | Graphica 2               |               | ~            | <b>✓</b>     |
|                                 | QuantumEvo H.264         | ~             | ~            | <b>✓</b>     |
|                                 | QuantumPlus<br>960H      | ~             | ~            | ~            |
|                                 | QuantumXtra<br>960H      | ~             | ~            | ~            |
| Internet<br>Browser<br>(IE9/10) | SmartTel/Disc/<br>Mobile | ~             | ~            | ~            |
|                                 | VK2 Cameras              |               | ~            | <b>✓</b>     |
|                                 | Eclipse2                 | <b>✓</b>      | ~            | <b>✓</b>     |
|                                 | Graphica Sabre           |               | ~            | <b>✓</b>     |
|                                 | Graphica 2 Server        |               | ~            | <b>✓</b>     |



|            |                    | iPod<br>touch | iPhone | iPad     | Android |
|------------|--------------------|---------------|--------|----------|---------|
| Q_REMOTE   | Quantum            | ~             | ~      | <b>✓</b> | ~       |
| S_REMOTE   | Smart              | ~             | ~      | <b>✓</b> |         |
| VK2_REMOTE | VK2 Range          | ~             | ~      | <b>✓</b> | ~       |
| G_REMOTE   | Graphica 2 & Sabre | ~             | ~      | <b>✓</b> |         |

<sup>\*\*\*</sup> Note - There are many telemetry protocols available in the market we can usually supply a telemetry protocol convertor to suit your application. Please call our Technical Support Dept. for assistance.

# CCTV SITE SURVEY FORM



| Location:  |                   |      | Date                 | 5:   |           |                   |                 |  |
|--|-------------------|------|----------------------|------|-----------|-------------------|-----------------|--|
| Consultant:  |                   |      | Com                  | npar | ıy Name:  |                   |                 |  |
| Address:   |                   |      |                      |      | ·         |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |
| Town/City:   |                   |      | Post                 | cod  | e:        |                   |                 |  |
| Telephone/ Fax:  |                   |      | E-m                  | ail: |           |                   |                 |  |
| Contact Name:  |                   |      | Title                | :    |           |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |
| What is the CCTV system required for?                          |                   |      |                      |      |           |                   |                 |  |
| What is the CCTV system required for?                          |                   |      |                      |      |           |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |
| Is there a budget set aside for the project, if so how much?   |                   |      |                      |      |           |                   |                 |  |
| How will the system be financed?                               | Purchase          | Г    | Lease                |      | Rental    |                   | Other           |  |
| For how many areas will viewing be required?                   |                   |      |                      |      |           |                   |                 |  |
| Is the system going?   | Indoors           | F    | Outdoors             |      | Both      |                   |                 |  |
| Are the site drawings available for design purposes?           |                   |      | Yes                  |      | No        |                   |                 |  |
| Does the drawing include wireways or ducting routes?           |                   |      | Yes                  |      | No        | П                 |                 |  |
| Is this system new or an add on?                               |                   |      | New                  |      | Add on    | $\overline{\Box}$ |                 |  |
| If an add on what data of the current system exists?           |                   |      | Full specs           |      | Drawings  | П                 |                 |  |
| Knowledgeable person   |                   |      |                      |      | None      |                   |                 |  |
| Is power available? If not, who will supply?                   | Customer          |      | Contractor           |      | Installer |                   |                 |  |
| Could ground loops occur?                                      | Yes               |      | No                   |      |           |                   |                 |  |
| Who will do the wiring?  | Customer          |      | Contractor           |      | Installer |                   |                 |  |
| Is a quotation required for the supply of cable?               | Yes               |      | No                   |      |           |                   |                 |  |
| If there are any civil works, who will do them?                | Customer          |      | Contractor           |      | Installer |                   |                 |  |
| Who is to monitor the system?                                  | V                 | /hat | t hours will they be | at w | ork?      |                   |                 |  |
| How many control/monitoring points are proposed?               |                   |      |                      |      |           |                   |                 |  |
| Is this system interfacing to others (e.g. Fire, Access Contro | ol, etc)? Yes     |      | No                   |      |           |                   |                 |  |
| Limited system access required (e.g. Limited personnel, ser    | nior staff, etc)? |      |                      |      |           |                   |                 |  |
| Special requirements for the system (e.g. Extra training, pr   | oject fees, etc)? |      |                      |      |           |                   |                 |  |
| During what hours can installation of the system take place    | 9?                |      |                      |      |           |                   |                 |  |
| What does the customer require?                                | Quotation         |      | Specification        |      | Drawings  |                   | Other (specify) |  |
| When is the quotation required for?                            |                   |      |                      |      |           |                   |                 |  |
| What validity period is required?                              |                   |      |                      |      |           |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |
| NOTES  |                   |      |                      |      |           |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |
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|  |                   |      |                      |      |           |                   |                 |  |
|  |                   |      |                      |      |           |                   |                 |  |

# CCTV CAMERA SURVEY FORM



| Camera number           |                      |           |                | Lo         | ocation         |          |           |              |  |
|-------------------------|----------------------|-----------|----------------|------------|-----------------|----------|-----------|--------------|--|
| Camera                  | Internal             | External  | Colour         | Mo         | onochrome       | ]        | Fixed     | Pan & Tilt   |  |
| Lens                    | Zoom                 | Fixed     |                |            |                 |          |           |              |  |
| Primary Subject View    | /ed                  |           |                |            |                 |          |           |              |  |
| Environment             |                      | Inland    | Marine         |            | Hazardous       | ]        |           |              |  |
| Surface material of vi  | iewed area           |           |                | Ob         | structions?     |          | Yes       | No           |  |
| Level of ID required?   |                      | Identify  | Recognition    |            | Detection       | ]        | Monitor   | Number Plate |  |
| Longest distance view   | ved                  | m         | Shortest dista | ance viewe | ed              |          | m         |              |  |
| Field of view - Shorte  | est Distance - Width | m x       | m Heigh        | t          | m x             | m        |           |              |  |
| Field of view - Longes  | st Distance - Width  | m x       | m Heigh        | t          | m x             | m        |           |              |  |
| Existing lighting - Day | /                    |           |                | Scene i    | llumination     |          |           | lux          |  |
| Existing lighting - Nig | ht                   |           |                | Scene i    | llumination     |          |           | lux          |  |
| Extra lighting necessa  | ary?                 | Yes       | No             | Туре       | e required?     | ]        | Infra-red | White        |  |
| Camera mounting su      | rface Wall           | Ceiling 🗌 | Corner         |            | Tower           | ]        | Roof      | Other        |  |
| Mounting surface ma     | terial               |           | Cā             | amera to c | ontrol distance | õ        |           |              |  |
| Cable route by          |                      |           | Cc             | ommon po   | wer source av   | ailable? | Yes       | No           |  |
| Camera record rate (i   | ips)                 | Event     | Record Yes     |            | No              | ]        |           |              |  |
|                         |                      | Ti        | me lapse (ips) |            |                 |          |           |              |  |
|                         |                      |           | Alarm (ips)    |            |                 |          |           |              |  |
| Camera record qualit    | У                    | Tim       | e lapse CIF    |            | 2CIF            | ]        | 4CIF      |              |  |
|                         |                      |           | Alarm CIF      |            | 2CIF            |          | 4CIF      |              |  |
| NOTES                   |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |
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|                         |                      |           |                |            |                 |          |           |              |  |
|                         |                      |           |                |            |                 |          |           |              |  |

# CCTV CONTROL ROOM EQUIPMENT



| Number                   |              | Location      |  |              |                        |                       |                  |   |
|--------------------------|--------------|---------------|--|--------------|------------------------|-----------------------|------------------|---|
| Facilities required      |              |               |  |              |                        |                       |                  |   |
| No of control positions  |              |               |  |              |                        |                       |                  |   |
| Graphical user interface |              |               |  |              |                        |                       |                  |   |
| Remote viewing location  | IS           |               |  |              |                        |                       |                  | _ |
| Switching                | Yes          | No            |  |              | Channel quantity       |                       |                  |   |
| Telemetry control        | Yes          | No            |  | Туре         | Coaxial                | Twisted Pair          | Channel quantity |   |
| Quad display only        | Yes          | No            |  | Colour       | Monochrome             | Quad quantity         |                  |   |
| Service contract         | Yes          | No            |  |              |                        |                       | _                | _ |
| Video printer            | Yes          | No            |  | Colour       | Monochrome             | High res              | Medium res       |   |
| Video motion detection   | Yes          | No            |  | Internal     | External               | Both                  | Channel quantity | _ |
| Digital Recording        |              |               |  |              |                        |                       |                  |   |
| Duration required        | Weeks        | Days          |  |              |                        |                       |                  | _ |
| Resolution               |              |               |  |              |                        |                       |                  | _ |
| Time lapse               | CIF          | 2CIF          |  | 4CIF         |                        |                       |                  |   |
| Alarm                    | CIF          | 2CIF          |  | 4CIF         |                        |                       |                  |   |
| Camera specific          |              |               |  |              |                        |                       |                  |   |
| Image refresh rate per s | econd        | Normal record |  | Alarm record | Camera specific        |                       |                  |   |
| Monitors                 |              |               |  |              |                        |                       |                  |   |
| TFT/LCD                  | 15"          | 17"           |  | 19"          | Specify                |                       |                  |   |
| VGA                      | FVGA         | XGA           |  |              |                        |                       |                  |   |
| External cable bulkhead  | Yes          | No            |  |              |                        |                       |                  |   |
| Termination box          | Yes          | No            |  | Size         | Bull                   | khead socket quantity |                  |   |
| Control equipment hous   | ing - Consid | deration:     |  |              |                        |                       |                  |   |
| Housing                  | New          | Existing      |  | Space        | e available size (HxWx | (D)                   |                  |   |
| Ventilation required     | Yes          | No            |  |              |                        |                       |                  |   |
| Cable entry by           | Conduit      | Trunking      |  | Tray         | Ducting                | Other                 |                  |   |
| Storage space            | Yes          | No            |  | Work         | ing shelf depth and h  | eight 🗌               |                  |   |
| Console                  | Yes          | No            |  | Wood         | Formica                | Metal                 |                  |   |
| Console design help requ | uired        | Yes           |  | No 🗌         |                        |                       |                  |   |
| Rack mount               | Yes          | No            |  | 19" format   | Other                  |                       |                  |   |
| Cabinet                  | Yes          | No            |  | Secure       | Open                   | ]                     |                  |   |
| Desktop mount            | Yes          | No            |  |              |                        |                       |                  |   |
|                          |              |               |  |              |                        |                       |                  |   |
| NOTES                    |              |               |  |              |                        |                       |                  | _ |
|                          |              |               |  |              |                        |                       |                  | _ |
|                          |              |               |  |              |                        |                       |                  | _ |
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|                          |              |               |  |              |                        |                       |                  |   |
|                          |              |               |  |              |                        |                       |                  |   |

### VNPR SITE SURVEY QUESTIONNAIRE



This document is to assist in producing a quote for a Vista Number Plate Recognition System by first explaining how to fill in the questionnaire and the questionnaire itself.

The guide is in three parts:

- Lane Information
- System Information
- Survey Form

A site visit is essential to ensure that the correct location for the cameras is found and pointed out to the customers. Ensure vehicles as far as possible approach the cameras with the plate head on to the camera. Also ensure that no obstacles are in the line of sight i.e. parking for vehicles, skirts on barriers etc.

#### LANE INFORMATION

The Lane information is to be completed for each lane to be monitored.

- Will the site be monitored 24 7?
- What is the preferred mounting for the VNPR camera?
- What is the maximum speed of the vehicles? If barriers are used ask if the barriers are ever opened at busy times?
- Make sure you are not just given the speed limit of the area.
- Type of lane i.e. Entry lane / Exit lane.
- Traffic flow i.e. is the traffic free flowing or tailgating?
- Is an overview camera required for this lane? If so what is it to display?
- Does the VNPR system on the lane have to interface to a third party device i.e. weighbridge, under vehicle scanning? If so please provide make, model and technical contact for the product with a brief overview of the
- Is the VNPR on this lane to be triggered i.e. to capture vehicles with no number plates or silver on black plates?

#### SYSTEM INFORMATION

- How many lanes in total are there?
- How many vehicles are there per day?
- How long are the images to be stored?
- Is this to interface with the police? Via a BOF2 interface (Back Office) or will the police provide a CD hotlist?
- Is the system to alarm? Via audible alarm, e-mail, SMS or Pop up box at an IP address?
- Is the system to count vehicles in a car park & allow different access to different groups?
- Is there any requirements not covered by the standard software?
- Where is the system to be controlled from, and what do they want to do at each of these points?

### VNPR SITE SURVEY QUESTIONNAIRE



#### AIDS TO QUOTATION

The Lite system has been designed with a barrier system in mind, and is provided as a tower PC, a video capture card and relay card. You need only to add a monitor and speakers to complete the system.

#### THE VNPR LITE SYSTEMS ARE NOW PROVIDED IN THE FOLLOWING CONFIGURATIONS:

- VNPR111Le
- VNPR211Le
- VNPR311Le
- VNPR411Le

The software is preinstalled and the unit can be configured either as a standalone unit or network client as standard. Providing the customer required no more than 1 VNPR camera and 1 overview camera per lane simply choose the appropriate part code for the number of lanes you require.

If the units are to be networked you will also require a VNPRLITESERVER, this will act to concatenate all the connected lanes and display them on a single PC. The VNPR server is provided complete with Windows server software and will allow the following maximum connections.

- 5 client PCs
- 20 lanes
- 5.000 transactions per hour
- Whichever limit is reached first

The customer will need to provide the network with network accessories such as KVM switchers, hubs, switches etc. For all server-based systems it is STRONGLY advised to take out our sofatware maintenance. This is where online network support is given to the system via ADSL.

# VNPR SITE SURVEY QUESTIONNAIRE



### eg:

| Lane Number  | Lane Details | Lane Details | Lane Details | Lane Details |
|--|--------------|--------------|--------------|--------------|
| Type of Lane<br>i.e. Entry or Exit   | Entry        |              |              |              |
| Width of Lane In metres (Maximum 3 metres per VNPR camera)   | 3 metres     |              |              |              |
| Camera Mount i.e. Wall / Pole / Clamp / Bollard  | Pole         |              |              |              |
| Distance camera to capture point In metres   | 18           |              |              |              |
| VNPR Cameras<br>Model of camera:   | VNPRCD18e    |              |              |              |
| Number of Overview Cameras & Function Overview camera function - driver / vehicle / other please state | 1            |              |              |              |
| Speed of Vehicles Stopped, 10mph, 20mph, 25mph, 30mph, 70mph or 100mph                                 | 10           |              |              |              |
| Interface to open/close barrier Relay card required / not required                                     | Υ            |              |              |              |
| Interface to external LED sign LED required / not required   | Υ            |              |              |              |
| Interface to Access Control system  Not required / Interface to xxxx access control system required    | N            |              |              |              |
| Interface to other equipment  Not required / Interface to xxxx required                                | N            |              |              |              |

| Lane Number  | Controller Details |  |
|--|--------------------|--|
| Number of vehicle transactions per day                           | 1000               |  |
| Picture Storage Requirements                                     | ALL                |  |
| Plate Text /Plate Patch / VNPR Camera / Overview Camera / All    | ALL                |  |
| Storage Requirements   | 31                 |  |
| Number of days storage required before overwritten               | 31                 |  |
| Interface to existing database                                   | N                  |  |
| Not required / Interface to xxxx required                        | TV.                |  |
| Bespoke Software   | N                  |  |
| Not required / The following additions xxxxxxx are required      | IN                 |  |
| Control Options  | N                  |  |
| Where is the controller to be sited, is there a Network present. | 17                 |  |



100BASE-T - A high-speed version of Ethernet (IEEE 802.3). Also called Fast Ethernet standard, 100BASE-T transmits at 100 Mbps.

**2CIF** (Common Intermediate Format) - 2CIF refers to the analogue video resolution 704x288 pixels. Also see Resolution.

**2D-DNR** - applied to the static part of the camera image, it reduces digital noise created by AGC in low light conditions (grainy effect).

**3D-DNR** - applied to the moving part of the camera image, it reduces digital noise created by AGC in low light conditions (grainy effect).

4CIF (Common Intermediate Format) - 4CIF refers to the analogue video resolution 704x576 pixels. Also see Resolution.

ACPO - Association of Chief Police Officers.

**Activity Detection** - A feature that uses video motion detection techniques to improve the camera update times. It also gives a relay

ADSL (Asymmetrical Digital Subscriber Line) - A telephone line with uneven transmission rates; half the transmission can attain speeds up to 640kbps; the other half can attain speeds of 2.048Mbps or greater in the opposite direction.

AGC (Automatic Gain Control) - An electronic circuit that tries to keep signals at a constant level; more useful in cameras at low light levels. The higher the number the better, typical values 12 - 20dB i.e. a gain of approx 4x - 10x.

**Ah** (Ampere Hours) - E.g. 1A for 6 hours = 6Ah. Always de-rate the battery capacity by 66%.

AI (Auto Iris) - An electronic circuit fitted to the iris of a lens to help compensate for large changes in light levels.

Alarm Bypass Relay - A relay in the controller that is used to shunt or bypass the door alarm contacts of a central alarm system to allow authorised access without causing an alarm.

Alarming - The ability of CCTV equipment to respond to an input signal, normally a simple switch closure. The response varies depending on equipment type, most common is for switcher to 'hold' on the camera corresponding to the alarm input.

ALC (Automatic Level Control) - On Al lenses, also known as the peak/ average control. Adjusting this control allows the auto iris circuitry to either take bright spots more into consideration (peak), bringing out detail in bright areas, or less into consideration (average) bringing out detail in shadows.

Ambient Light Level - Background or general light level of a given area.

**Analogue** - A signal in which any level is represented by a directly proportional voltage not digital.

Angle of View - This is what alters (not the focal length) when you use a lens designed for one format on another format. It decreases with format size.

Aperture - The 'opening' of a lens, a measure of its light gathering capability. Relative Aperture is a ratio between its focal length and effective aperture, measured in F numbers, generally the lower the better.

Archive - Long-term off-line storage. In digital systems, pictures are generally archived onto some form of hard disk, magnetic tape, floppy disk or DAT cartridge, CD-ROM, DVD or flash card.

ARC (Alarm Receiving Centre) - A secure location where signals from alarm systems are monitored 24 hours a day.

ARC (Alarm Receiving Centre) - This protocol is used to associate an IP address to a hardware MAC address.

Aspect Ratio - The ratio of the picture frame width to the picture frame height in standard TV systems. It is 4 units horizontal over 3 units

**Aspherical Lens** - A lens designed with a non spherical shape so that it refracts the light passing through it to either lower the lens aperture so that it passes more light or decrease barrel distortion on wide angle

ATW (Auto Tracing White) - Automatically adjusts the white balance in response to varying light conditions.

Auto-terminating - Feature whereby the equipment automatically selects the correct termination depending on whether the video output BNC is connected

Auto White Balance - Feature on colour cameras whereby the camera constantly monitors the light and adjusts its colour to maintain white

Back Focus - The mechanical aligning of the imaging device with the focal point of the lens. Most important on zoom lenses to ensure the image stays in focus throughout the zoom range.

Balanced Signal - Method of transmitting video, usually over twisted pair cable, that consists of two equal but opposite signals being sent down two conductors.

Balun (Balanced Unbalanced) - A device that connects a balanced line. such as twisted pair, to an unbalanced line, such as coax cable

Bandwidth - The range of frequencies available for signalling the difference between the highest and lowest frequencies of a band, measured in Hertz.

Baud Rate - Unit of signalling speed. The speed in baud is the number of line changes (in frequency, amplitude, etc.) or events per second. At low speeds, each event represents only one bit condition, and baud rate equals bps. As speed increases, each event represents more than one bit and baud rate does not truly equal bps.

Binary - A base 2 numbering system using the two digits 0 and 1 (as opposed to ten digits [0-9] in the decimal system). In computer systems, the binary digits are represented by two different voltages or currents, one corresponding to zero and another corresponding to one. Positive logic uses a positive voltage to represent binary 1 and zero volts to represent binary O.

Bit (Binary Digit) - The smallest unit of information in a binary system. A one or zero condition.

Black Level - The level on a video signal, just above the sync pulses, where black portions of the picture are represented.

Blanking (Field and Line Flyback Blanking) - The operation of turning off the monitor display or pick-up device during sync pulses to avoid thin white lines appearing on the picture.

**BLC** (Back Light Compensation) - A feature of modern CCD cameras which electronically compensates for high background lighting to give detail which would normally be silhouetted.



**Blooming** - The halation and defocusing effect that occurs around the bright areas of the picture (highlight) whenever there is an increase in the brightness intensity.

**BNC** - Video connector, the most commonly used in CCTV.

Bridge - A device that connects two LAN segments together, which may be of similar or dissimilar types, such as Ethernet and Token Ring.

**Broadband** - In network engineering terms, this describes transmission methods where two or more signals share the same carrier

BS (British Standards) - BS4737 Standards for design, installation and maintenance of intruder alarm systems prior to the introduction of

BS5750 Internationally recognised quality standard company management systems.

BS5979 Standards for construction and working of an ARC.

BS6799 Standards for wireless intruder alarm systems.

BS8418:2010 Code of practice for the installing & remote monitoring of detector activated CCTV sysems.

BSI - British Standards Institute.

BSIA - British Security Industry Association.

Byte - A unit of information, usually shorter than a computer "word". Eight-bit bytes are most common. Also called a "character"

Cable Screen/Shield - A conductor which forms a sheath around one or more insulated conductors. This reduces the effect of interference onto the conductors. This shield is usually metallic foil or stranded wire wrapped around the conductors.

Category 1 through 5 cables - (CAT 1-5) - The following categories are based on their transmission capacity. Categories 1 through 5e are based on the TIA/FIA-568 standard.

CAT1 UTP Analogue Voice, CAT2 UTP Digital Voice, 1-Mbps Data. CAT3 UTP, STP 16-Mbps Data. CAT4 UTP, STP 20-Mbps Data. CAT5, 5e UTP STP 100-Mbps Data

CCD (Charged Coupled Device) - A 'chip' that performs the same function as a camera tube.

**CCIR** (Comite Consultatif International des Radiocommunications) -The European TV standard 625 lines 50 fields.

CD-ROM (Compact Disk Read-Only Memory) - A compact disk format used to hold text, graphics and hi-fi stereo in excess of 650 MB of data, which is equivalent to about 250,000 pages of text or 20,000 mediumresolution pages

Chrominance (C) - The part of the video signal corresponding to the colour information.

CIF (Common Intermediate Format) - CIF refers to the analogue video resolution 352x288 pixels. Also see Resolution.

Client/server - Client/server describes the relationship between two computer programs in which one program, the client, makes a service request from another program, the server, which fulfils the request.

CM (Colour Monochrome) - Colour Mono camera with fixed IR cut filter.

CMOS (Complementary Metal Oxide Semiconductor) - A CMOS is a widely used type of semiconductor that uses both negative and positive circuits. CMOS chips require less power than chips using just one type

of transistor. CMOS image sensors also allow processing circuits to be included on the same chip.

C Mount - Long established industrial standard for connecting cameras and lenses, widely used in the CCTV industry.

Co-Axial Cable - A type of shielded cable capable of carrying a wide range of frequencies (video or radio) with very low signal loss.

Codec - Codecs are used to convert analogue video and audio signals into a digital format for transmission. The codec also converts received digital signals back into analogue format.

Colour Burst - That portion of the composite colour signal, comprising a few cycles of a sine wave of chrominance sub carrier frequency, which is used to establish a reference for demodulating the chrominance signal. Normally approximately 10 cycles of 4.43MHz.

Composite Sync - A signal comprising of both Line and Field sync pulses but without any video information.

Composite Video - A mixed signal comprised of red, green, blue, horizontal and vertical retrace. All compiled and sent via one video signal on one wire to an RCA connector.

**Compression** - A number of methods to reduce the size of digital information. See J-PEG, M-PEG and Wavelets.

Conditional Refresh - Technique used in slow and fast scan where only small screen changes are transmitted. Up to a certain percentage of the on-screen picture can be updated before a full picture is required.

Contrast Ratio - The ratio between white and black. The larger the contrast ratio the greater the ability of a projector to show subtle colour details and tolerate extraneous room light. There are two methods used by the projection industry:

1) Full On/Off contrast measures the ratio of the light output of an all white image (full on) and the light output of an all black (full off) image.

2) ANSI contrast is measured with a pattern of 16 alternating black and white rectangles. The average light output from the white rectangles is divided by the average light output of the black rectangles to determine the ANSI contrast ratio.

CPU (Central Processing Unit) - Computer or Control Panel Unit (Alarm).

Crosstalk - An undesired signal that interferes with the desired signal.

**CS Mount** (Special C Mount) - New standard for connecting cameras and lenses. It has a shorter penetration into the camera, needed for many modern CCD designs.

CS to C Mount Adaptor - 5mm spacer ring used to enable the use of C mount lenses on CS mount cameras.

D1 - D1 refers to the analogue video resolution 720x576 pixels. Also see Resolution

Daisychain - To connect devices in a series, one after the other, where the transmitted signals go to the first device, then to the second and so

**Data Cable** - Cable used for transmitting low level signals between system units.

dB (decibel) - A logarithmic unit for comparing two voltages, each 6dB doubles the voltage

DD (Direct Drive) - An auto iris lens requiring a DC reference from the camera rather than the traditional video reference.



Depth of Field - The area of acceptable focus of an image. The wider you set the aperture of a lens the lower the depth of field becomes.

**DHCP** (Dynamic Host Configuration Protocol) - DHCP is a protocol that lets network administrators automate and centrally manage the assignment of Internet Protocol (IP) addresses to network devices in a network.

Dialup Line - A two way line used in Public Switched Telephone Network (PSTN)

Digital - A signal that levels are represented by binary numbers. These can be kept in a store.

Digital Signal Processing (DSP) - An algorithm within the camera that digitises data (the image). Examples include automatic compensate for backlight interference, colour balance variations and corrections related to aging of electrical components or lighting. Functions such as electronic pan and zoom, image annotation, compression of the video for network transmission, feature extraction and motion compensation can be easily and inexpensively added to the camera feature set.

**DIN Connector** (Deutsches Institute fur Normung) - A German Standards Institute connector. A family of plugs and sockets used to connect mice, keyboards and various audio devices.

Distortion - The deviation of the received signal waveform from that of the original transmitted waveform.

Distribution Amplifier - A device that accepts a video signal and sends it out over a number of independent outputs.

**DNS** (Domain Name System) - DNS is used to locate and translate Internet domain names into IP (Internet Protocol) addresses.

**DRC** (Dynamic Range Control) - Visibly brightens the subject in a dark

**Dry Contact** - A contact that is isolated or unconnected from any electrical source.

DSL (Digital Subscriber Line) - A family of technologies that provide digital data transmission over the wires of a local telephone network. Examples include ADSL (Asymmetric DSL) where upload speeds are less than download and SDSL (Symmetric SDSL) where data speeds are the same in both directions.

DVD (Digital Video Disk, Digital Versatile Disk) - A de facto standard agreed on by the computer, consumer electronics and entertainment industries for storing 4.7GB or more data on a single optical disk the size

**DVR** (Digital Video Recorder) - See Hard Disk Recorder.

**D-WDR** - Digital Wide Dynamic Range allows the installer to resolve highly contrasting scenes of view to provide a more balanced image.

**Dwell Time** - The length of time a switcher will hold a camera before moving on to the next in sequence.

**EHLC** (Excessive Highlight Compensation) - The brighest part of the picture is dimmed to allow the other areas to be viewed

El (Electronic Iris) - Automatically varies a CCD camera's shutter to mimic Auto Iris control, allowing fixed or manual iris lenses to be used in a wider range of areas.

**EIA** (Electronic Industries Association) - A standards organisation in the US specialising in the electrical and functional characteristics of interface equipment.

**Encoded** - The result of transferring information in a coded form to a medium.

EOL - End Of Line.

**EPROM** (Erasable and Programmable Read Only Memory) - An electronic chip used in many different security products that stores software instructions for performing various operations.

Ethernet - Ethernet is the most widely installed local area network technology. The most commonly installed Ethernet systems are 10BASE-T and 100BASE-T10, which provide transmission speeds up to 10 Mbps and 100 Mbps respectively. A local area network (LAN) developed by Xerox, Digital Equipment Corp. and Intel. Standardised as IEEE 802.3 and ISO 8802.3. Ethernet connects up to 1024 nodes at 10 Mbps over twisted-pair, coax and fibre optic cable. When a station is ready to send. it transmits its data packets onto the network, which is common to all nodes. All stations "hear" the data. The station that matches the destination address in the packet responds while the others do nothing. Ethernet is a data-link protocol and functions at the Physical and Datalink Levels of the OSI model (Layers 1 and 2).

Ethernet Address - A unique 48-bit number maintained by the IEEE/ ISO and assigned to each Ethernet network adapter.

**Ext. Sync** (External Sync) - The ability of CCTV equipment, normally cameras, to accept one or more of the standard sync formats so as to align itself to the rest of the system.

External Sounder - A device which gives an audible and visual verification of an alarm activation

**EXview™** - The latest interline CCD sensor from Sony that has increased sensitivity across the visible spectrum and the near IR.

Fibre Optic - The process of transmitting light through a long, flexible fibre such as glass or plastic, for the purpose of transmitting video, audio, or data over long distances.

Field - One half of a frame, consisting of either the odd or the even numbered lines. 50 fields are transmitted every second.

Field of View - The view achieved with a particular lens; varies with the focal length.

File - The orderly arrangement of data or information.

Firewall - A firewall works as a barrier between networks, e.g. between a Local Area Network and the Internet. The firewall ensures that only authorised users are allowed to access the one network from the other.

Flash memory - A memory chip that holds its content without power but must be erased in fixed blocks rather than single bytes. Block sizes typically range from 512 bytes up to 256KB.

FLK/FLC - Setting in cameras that will allow the camera to work with 50hz fluorescent lights to keep the camera from pulsing.

Focal Length - Of a lens, the distance in millimetres, between its secondary principal point and its focal point. The higher the number the greater the magnification and the less the field of view.

Focal Point - The point on the axis of a lens to which parallel rays of light will cover.

**Focus Range** - The range of distances a projection unit can be from a target surface/screen. It is recommended the projection unit be mounted or placed within this distance to ensure optimum image quality and clarity.



Format - How the computer arranges the information onto disk. Can also apply to printers.

Frame - One complete TV picture made up of approximately 625 lines. 25 frames are transmitted every second.

Frame Store - Digital information store capable of holding a complete frame of video information.

Frame Transfer CCD - Type of CCD chip which consists of vertical charge transfer channels placed side by side. During vertical blanking. the charge generated in the light sensitive imaging area is rapidly transferred into a shielded storage area. During the horizontal blanking, this charge is shifted down a line at a time into a horizontal shift register where it is clocked out during each line period to form the video signal.

Frequency - A unit of measurement for electrical signals.

FSK - Frequency Shifted Keying a form of signaling employed by some coaxial born telemetry equipment.

FTP (File Transfer Protocol) - FTP is an application protocol that uses the TCP/IP protocols used to exchange files between computers/devices on networks.

Full Picture Update - The technology which enables a transmission system to update a high quality full picture on each picture refresh at very fast speeds.

Galvanometric (Galvometric) - One method of converting the small electric currents produced by Auto Iris circuits into physical movement of the iris diaphragm. Used in both Auto Iris and Direct Drive lenses.

Gamma - A camera adjustment that ensures a linear correlation of light gain on the entire system e.g. a doubling of light input gives double light

Gateway - A gateway is a point in a network that acts as an entry point to another network.

Gen. Lock (see Ext. Sync) - To synchronize one piece of equipment to the sync pulses of another.

**Ghost** - A shadowy or weak image in the received picture, offset to either the right or to the left of the primary image.

Gigabit Ethernet - Technology that adapts the Ethernet model for data transmission at 1 Gbps or higher.

Gigabyte (GB) - Order of magnitude; 109

GPRS - General Packet Radio Service.

GPS - Global Positioning System.

**Ground Loop** - An unwanted continuous or temporary ground current flowing back and forth between two devices that are at different ground

**GSM** - Global System for Mobile communications.

H.264 - H.264 is a standard for video compression. It provides quality video at lower bit rates than some other video compression methods.

Hard Disk - Non volatile digital data storage device used in PCs. Come in various storage sizes, normally measured in GB. See Hard Disk Recorder.

Hard Disk Recorder - HDR (Digital Video Recorder - DVR) - Device that uses digital techniques to record CCTV pictures to a hard disk. The results can be of higher quality than VHS or SVHS; events can be found faster and there is no loss of quality when copies are made.

Hardwired - Method of controlling camera points using multi core cable.

Horizontal Resolution - The maximum number of individual picture elements that can be distinguished in a single scanning line.

Hot Swapping - Removing and replacing a component of a larger system while the system is receiving power and operating.

**HSBLC** (Highlight Suppression Back Light Compensation) - An electronic circuit that turns any white part of a video signal, over a preset level to black. If installed in the auto iris video line it decreases the contrast of one picture, bringing out detail otherwise lost in shadow.

HTML (Hypertext Mark-up Language) - A standard for defining documents with hypertext links. HTML is a subset of SGML (Standard Generalised Mark-up Language) and is used to establish links between documents on the World Wide Web.

HTTP (Hypertext Transfer Protocol) - The clients/server protocol used for connections to servers on the World Wide Web. Addresses of Web sites begin with an http://prefix.

**Hub** - A central connecting device in a network that joins communications lines together in a star configuration.

Hum - Electrical disturbance at the power supply frequency or harmonics thereof.

Hz (Hertz) - Cycles per second.

Ident - Number or title super-imposed on a video signal.

Image Burn (Retained Image) - A change produced in or on the target of the pickup device which remains after the removal of a previously stationary light image.

Image compression - Image compression minimises the file size (in bytes) of an image.

Image Sensor Format - Size of the CCD element in the camera.

Impedance - The effective resistance of an electronic circuit to an A.C. signal.

Interlace (2:1 Interlace) - The accurate combining of two fields, one odd one even, into a single frame.

**Interleaving** - Method used with alarms or activity detection which allows extra frames of video from alarmed cameras to be added to a time multiplexed sequence whilst a state of alarm exists.

**Interline Transfer CCD** - Type of CCD chip in which the photosensors acquire and store an electric charge according to the intensity of light falling on them. The charges are first transferred to a vertical shift register and then a horizontal shift register. This is controlled by an external pulse timing system.

**Internal Sync** (crystal controlled) - A camera that generates its sync pulses without reference to any other source. Normally using a crystal controlled oscillator.

Internet - Any large network made up of several smaller networks. A group of networks that are interconnected so that they appear to be one continuous large network and can be addressed seamlessly at the OSI Network layer through routers. The industry name for the Worldwide interconnected network. Based upon the original ARPANET network, it's used as a reference resource, a way of sending e-mail and an online chat room for users around the world.



**Intranet** - A network connecting a related set of standard Internet protocols and files in HTML format with employees using Internet browsers in an organisation's network and within the corporate firewalls.

IOs - Input/Outputs.

IP (Internet Protocol) - The Internet Protocol is a method of transmitting data over a network. Each computer (or host) on the Internet has at least one address that uniquely identifies it from all others.

IP address - An IP address is simply an address on an IP network used by a computer/device connected to that network.

IR (Infra Red) - A range of frequencies lower than visible red light used for covert surveillance or as a low cost wireless video link

Iris (Iris Diaphragm) - Adjustable diaphragm that regulates the amount of light passing through a lens.

J-PEG (Joint Picture Expert Group) - A popular suite of digital compression tools. Originally for use with "still" pictures but often used in CCTV products.

**KB** - Kilobyte, or one thousand bytes or characters of information.

LAN (Local Area Network) - A data-communications system confined to a limited geographic area (up to about 10km) with moderate to high data rates (100 kbps to 100 Mbps). The area served may consist of a single building, a cluster of buildings or a campus-type arrangement. The network uses some type of switching technology and does not use common carrier circuits (although it may have gateways or bridges to other public or private networks)

LCD (Liquid Crystal Display) - A type of flat screen display.

LED - Light Emitting Diode.

Lens Calculator Software - A computer program for specifying correct

Lens Calculator Wheel - Used for calculating a lens size or distance from a camera to the subject.

Line Amplifier (Video Line Corrector) - A device to make good the loss of signal strength and quality due to long cable runs.

Line Lock - To synchronize the field sync pulses of an AC powered camera to the frequency of the voltage input (line voltage).

Linux - A freeware, clone version of the UNIX System V release 3.0 kernel that runs on PC x86 machines and other platforms.

Looping - Video input of a piece of video equipment both unterminated and including the relevant sockets for the extra coaxial cables.

Loss - A reduction in signal level or strength, usually expressed in dB.

LPC - Loss Prevention Council.

Lumen (LM) - The unit of luminous flux. It is equal to the flux through a unit solid angle (steradian) from a uniform point source of one candela or to the flux on a unit surface of which all points are at a unit distance from a uniform point source of one candela.

**Luminance** (Y) - The part of a video signal that consists of the monochrome data.

Lux - Metric measure of the light striking a surface. The light available from that surface will depend on how reflective it is.

MAC (Media Access Control) Layer - The protocol that controls access to the physical transmission medium on a LAN.

MAC Address (Media Access Control Address) - A MAC address is a unique identifier associated with a piece of networking equipment or more specifically its interface with the network.

**Macro** - Feature allowing you to pre-programme frequent system configurations for selection by a single keystroke or optionally by alarm inputs.

Mask - See Privacy Zones

Master Code - The operators code for the system that has additional privileges such as being able to delete other user codes.

Matrix Switcher - A switcher able to route any of its camera inputs to any of its monitor outputs; a name usually reserved for large systems that often includes telemetry control.

MD (Motion Detection) - Recording method for digital surveillance systems. When someone walks in front of a camera, the pixels change and the DVR defines this as motion. The surveillance system will then record these images to the hard disk. This is a popular recording setup as every event recorded is actually motion driven as opposed to a static image if the system was set to record continously.

Mechanical Focus (Back-Focus, Racking) - The mechanical aligning of the imaging device with the focal point of the lens; most important on zoom lenses to ensure the image stays in focus throughout the zoom

Megabyte (Mb) - A unit used in measuring the amount of information a computer can store, which has the value 1048576 bytes.

Micro - Order of magnitude; 10-6.

Microwave - Radio frequencies between 1 - 30 GHz used for video transmission over medium/long distance.

Milli - Order of magnitude: 10-3.

Modem - Used with PSTN telephone lines to connect a fastscan system to the dial up BT network.

Modem (Modulator-Demodulator) - A device used to convert serial digital data from a transmitting terminal to an analogue signal (carrier) for transmission over a telephone channel or to reconvert the transmitted analogue signal to serial digital data for acceptance by a receiving terminal.

**Modulate** - To change or vary some parameter such as varying the amplitude of a signal for amplitude modulation or the frequency of a signal for frequency modulation. A Modulator is the circuit that modulates the signal.

Monochrome - Black and white, not colour.

**Motion JPEG** - Motion JPEG is a simple compression/decompression technique for network video. Image quality is controlled by adjusting the compression level, which in turn provides control over the file size, and thereby the bit rate.

M-PEG (Moving Picture Expert Group) - A suite of digital compression tools specifically designed to video images.

**MPEG-4** - A group of audio and video coding standards and related technology. The primary uses for the MPEG-4 standard are web (streaming media) and CD distribution, conversational (videophone), and broadcast television.



**Multicast** - Bandwidth-conserving technology that reduces bandwidth usage by simultaneously delivering a single stream of information to multiple network recipients.

**Multimode Fibre** - An optical fibre with a core diameter of 50 to 100 microns. Its core causes some distortion and provides less bandwidth than single-mode fibre.

Multiplex (Time Multiplex) - Using one carrier to send more than one signal. In video multiplexers, achieving this by sending a different camera's output in each successive field or frame of a video signal, in a form that can later be retrieved as single camera pictures.

NACOSS (National Approval Council for Security Systems) - Now replaced with the NSI.

Native - The raw memory capacity of a given media. The memory capacity of tapes is often specified including the tape drives 2:1 compression capabilities. i.e. a 12GB native tape will be specified as 24GB etc. Digital hard disk recorders cannot use the tape drives 2:1 compression capabilities.

Nano - Order of magnitude; 10-9.

N/D (Neutral Density) - A filter that attenuates light equally over the whole visible spectrum.

**Network** - A series of points connected by communications channels.

Network connectivity - The physical (wired or wireless) and logical (protocol) connection of a computer network or an individual device to a network

NIC (Network Interface Card) - Board that provides network communication capabilities to and from a computer system. Also called

NICEIC - National Inspection Council for Electrical Installation

Noise - Undesired signal(s) that corrupts the original video signal and may reduce image quality.

NSI - National Security Inspectorate.

NTSC (National Television Standards Committee. See EIA) - Colour TV system used in the USA.

Null Modem - A device that connects two DTEs directly by emulating the physical connections of a DCE.

NVM - Non Volatile Memory.

Ohm - The unit of resistance. The electrical resistance between two points of a conductor where a constant difference of potential of 1 Volt applied between these points produces in the conductor a current of 1 Ampere, the conductor not being the source of any electromotive force. It can be represented by the formula  $V = I \times R$ , where: V = Voltage I =Current R = Resistance

OSD (On Screen Display) - The ability of a camera or a piece of camera control equipment to display its set-up menu on a display monitor. Thereby greatly simplifying installation.

**OSI** (Open System Interconnection) - An architectural model developed by the ISO for the design of open systems networks. All communication functions are divided into seven standardised layers; Physical, Data Link. Network, Transport, Session, Presentation and Application

Overscan - A video monitor condition in which the raster extends slightly beyond the physical edges of the CRT screen, cutting off the outer edges of the picture.

PAL (Phase Alternate Line. See CCIR) - Colour TV system used in the UK.

Pan - Side-to-side movement of a camera (on a horizontal axis).

Partition - Segmented section of a security system.

Passive - A non powered element of a system.

Password - A special word, code or symbol that must be presented to the computer system to gain access to its resources. It identifies the user to the computer system.

Patch Panel - A panel where circuits are terminated and facilities provided for interconnecting between circuits by means of jacks and

PCI (Peripheral Component Interconnect) Bus - PCI Local Bus is a high-performance bus that provides a processor-independent data path between the CPU and high-speed peripherals. PCI is a robust interconnect mechanism designed specifically to accommodate multiple high performance peripherals for graphics, full-motion video, SCSI and

PCMCIA (Personal Computer Memory Card International Association) -A non-profit trade association founded in 1989 to standardise a method for connecting peripherals to PCs. PCMCIA created a 16- bit socket that's "Plug-and-Play" compatible and can be automatically configured by a software driver called PCMCIA Card Services.

Peak White Inverter (Eclipser) - An electronic circuit that turns any white part of a video signal, over a preset level, to black. If installed in the auto iris video line it decreases the contrast of one picture, bringing out detail otherwise lost in shadow.

Pedestal - The portion of a video signal between the sync pulses and the black level.

Peer-to-Peer - Communications in which both sides have equal responsibility for initiating, maintaining and terminating the session.

Phase Adjustable (see Line Lock) - The ability to delay the line locking process, so as to align cameras fed from AC voltages on different phases

Photocell - Automatically switches on the infra-red lights when light levels fall to a preset level.

Pico - Order of magnitude; 10-12.

PIN - Personal Identification Number.

PING (Packet InterNet Groper) - A utility used to determine if a TCP/IP device is available and responsive on a network or at an Internet site.

PIR (Passive Infra-Red Receiver) - Movement/motion detector.

Pixel (Picture Element) - The smallest cell or area of a CCD chip capable of displaying detail on a screen. The greater the number of pixels, the higher the resolution.

Plasma - A type of flat screen display.

PoE (Power over Ethernet) - Provides power to a network device via the same cable as used for the network connection.

Port - That portion of a computer through which a peripheral device may communicate.

P-P (Peak-to-Peak) - The voltage of a signal measured between its most positive and negative points. CCIR standard video is 1 volt P-P.



PPP (Point-To-Point Protocol) - A data-link protocol that provides dialup access over serial lines by encapsulating protocols in specialised Network Control Protocol packets. These packets can be used to replace a network adapter driver which allows remote users to log on to the network as if they were in-house.

Presets - The pre-positioning of pan, tilt and zoom cameras by the use of potentiometers in the moving parts of the camera head. These allow the control equipment to store and move to a set reference point when the controller dictates or when an alarm exists. Special telemetry equipment is required.

Privacy Zones - The ability to mask out a specific area to prevent it from being viewed or recorded.

**Progressive Scan** - Progressive scan, as opposed to interlaced video. scans the entire picture, line by line every sixteenth of a second.

PROM - Programmable Read Only Memory.

Protocol - A special set of rules governing how two entities will communicate.

Protocol Converter - Data transmission converter i.e. RS232 to RS485 or vice versa.

PSTN (Public Switched Telephone Network) - Any switching communication system- such as Telex, TWX or public telephone networks- that provides circuit switching to many customers.

PSU - Power Supply Unit.

Pulse - A positive or negative change in voltage that conveys information to a circuit.

QCIF (Quarter Common Immediate Format) - refers to the analogue video resolution 176x144 pixels. Also see Resolution

Quad Splitter - Device that uses digital techniques to compress four full pictures onto one monitor screen.

Rack Mount (19" rack) - An industrial standard housing 19" wide, its height is measured in units (Us) of 1.75"

Radio Frequency (RF) - Signals with a repetition rate above audible range, but below the frequencies associated with heat and light.

RAID (Redundant Array of Independent Disks) - This a technology of connecting a number of hard drives into one mass storage device, which can be used, among other things, for digital recording of video images.

RAM (Random Access Memory) - Read/write memory of a computer. Usually a memory chip that can be written to, read from and erased from.

Range Finder - Used to determine the focal length needed and what the picture will look like on the monitor. The user looks through the device and adjusts the range finder to the desired picture. Numbers on the outside of the range finder indicate the focal length needed.

RCA Connector - The type of jacks used by most stereo equipment and VCRs - audio and composite video input.

**Refresh Rate** - The number of times per second a displayed image is regenerated. Measured in Hertz, e.g, 60Hz or 60 times per second. The faster the rate, the steadier the image.

Relay - A magnetically operated mechanical switch.

Remote Access - The ability of a computer in one location to connect to a device at another location or site.

Remote Access Server - A computer or self-contained unit that provides remote dialup access to a LAN through modems and/or ISDN adapters

Remote Control - A transmitting and receiving of signals for controlling remote devices such as pan and tilt units, lens functions, wash and wipe control and similar. It may also refer to the hand held controls for some VCRs and other CCTV equipment.

**Remote Set-up** (Cameras) - The ability to set-up the cameras operational features, with the ease of OSD, compatible via co-axial telemetry transmitters, without the need for telemetry receiver. No extra cabling is required.

**Resolution** - A measure of the ability of a camera or television system to reproduce detail. Typically refers to the number of picture elements that can be reproduced with good definition. The larger the number of pixels the higher the resolution, creating finer and smoother images when displayed. Higher resolutions allow more information to be displayed on the same size screen.

**VGA** = 640x480, SVGA = 800x600

**XGA** = 1024x768, Wide XGA = 1366x768

**SXGA** = 1280x1024, SXGA+ = 1400x1050

**UXGA** = 1600x1200

Ripple - Amplitude variations in the output voltage of a power supply caused by insufficient filtering.

Roll - A loss or weakening of vertical sync which causes the picture to move up or down on the TV screen.

Router - A system that stores and forwards data packets - by way of network addresses - from one LAN to WAN to another.

RG-59 - A video coaxial cable with 750hm characteristic impedance. A type of coaxial cable that is most common in use in small to mediumsize CCTV systems. It has an outer diameter of approx. 6mm and it is a good compromise between maximum distances achievable (up to 250m) and good transmission.

RGB (Red, Green, Blue) - These three colours represent the entire colour spectrum

Router - A device that determines the next network point to which a packet should be forwarded on its way to its final destination.

RS232 - A commonly used computer serial interface.

RS422 - EIA interface standard that generally operates in conjunction with RS-449 and specifies electrical characteristics for balanced circuits and extends transmission speeds and distances beyond RS-232/V.24. RS-422 is a balanced voltage system with a high level of noise immunity.

RS485 - Balanced interface similar to RS-422/V.11 but using tri-state drivers for multidrop applications

RTP (Real-Time Transport Protocol) - RTP is an Internet protocol for the transport of real-time data, e.g. audio and video.

Rugby Clock - Radio signal to synchronize equipment clocks accurately and that automatically adjusts the BST setting.

Scanner - A pan only unit.

**SCART** - Standard European 20 pin connector used for carrying both video and audio signals in domestic TV appliances, now utilised on some CCTV equipment.



**SCSI** (Small Computer Standard Interface) - A hardware bus interface that enables a single expansion board in the computer to be connected to up to 7 or 15 peripheral devices (hard disk, CDROM, scanner, etc).

**SDN** (Software Day/Night) - Colour Mono with no fixed IR cut filter.

SECAM (Systeme Electronique Couleur Avec Memoire. See CCIR) -Colour TV system used in France.

Sens-Up - This feature is programmable and slows down the shutter speed in monochrome mode for brighter pictures in extremely low light

Sensitivity - A camera's ability to reproduce a given scene with a given amount of light. Usually expressed in lux.

Serial Transmission - Method of data transmission in which the bits of a data character are transmitted sequentially over a single channel.

**Server** - In general, a server is a computer programme that provides services to other computer programmes in the same or other computers.

**Shutter** - An electronic circuit available on many CCD cameras. Allowing the light gathering period (1/50th of a second) of the camera to be stopped prematurely (as little as 100,000 of a second).

SIA (Security Industry Association) - Also describes a signalling protocol.

**Single-Mode Fibre** - An optical fibre that supports only one mode of light propagation above the cut off wavelength. The core diameters are usually between 5 and 10 micrometres.

Smear - An unwanted side effect of vertical charge transfer in a CCD chip. It shows as vertical white (or sometimes red) stripes in parts of the image where there are very bright highlights. In some modern chip sets smear is minimised to almost undetectable levels.

**SMTP** (Simple Mail Transfer Protocol) - SMTP is used for sending and receiving e-mail.

**S/N Ratio** (Signal to Noise Ratio) - Measure of noise levels of a video signal: the higher the number the better.

Spot Filter - A small insert used in a lens to increase the F-stop range

SSAIB - Security Systems and Alarm Inspection Board.

**Switch** - A switch is a network device that connects network segments together, and which selects a path for sending a unit of data to its next

Swivel Mount - Used on a tower or bracket to enable the housing to be pointed at any angle, vertically or horizontally.

**Sync** (Synchronisation Pulses) - Pulses generated, normally by the camera, to tell other pieces of equipment when a picture (field sync) or one line of a picture (line sync) is to start.

TCP/IP - TCP is used along with the Internet Protocol (IP) to transmit data as packets between computers over the network.

TDN - True Day/Night colour monochrome operation with switching IR cut filter

Tearing - A term used to describe a picture condition in which groups of horizontal lines are displaced in an irregular manner.

Telnet - Telnet is a simple method with which to access another network device, e.g. a computer.

Terminated (750hm terminated) - Video input of a piece of CCTV equipment, wired to be the last in a particular video line.

Telemetry - A system utilising 'control code' transmitters and receivers. These use the video cable or a simple twisted pair cable to send their information.

TFT (Thin Film Translator) - A type of flat screen display.

Token Ring - A network-access mechanism and ring topology in which a supervisory frame or token is passed from station to station as a poll for network transmission (IEEE 802.5 standard).

**Triplex™** - Feature that gives you the ability to simultaneously view both playback and live cameras within the same multi-screen, while still encoding.

TVL (Television Lines - Resolution) - The maximum number of changes between light and dark on a picture across 3/4 of the width dictates the resolution of a CCTV product, measured in TVL.

Twisted Pair - A cable, often screened, that consists of two conductors twisted together along their length.

**UDP** (User Datagram Protocol) - UDP is a communications protocol that offers limited service for exchanging data in a network that uses the Internet Protocol (IP).

**Unicast** - Communication between a single sender and a single receiver over a network.

**UNIX** - An operating system originally designed by AT&T for multi-users applications. Other versions include AIX, XENIX and LINUX.

**Unterminated** (Hi-Z) - Video input of a piece of CCTV equipment, wired so as to allow the video signal to be fed to further equipment. Does not necessarily include extra sockets for the extra coaxial cables.

Update Rate - The number of pictures (fields) per second recorded by timelapse VCRs/Multiplexers or HDRs.

**UPS** (Uninterruptible Power Supply) - These are power supplies used in the majority of high security systems, whose purpose is to back-up the system when the mains power fails. The duration of this depends on the size of the UPS, usually expressed in output VA (or kVA), and the hold up time expected from fully charged batteries. There are two common types, "off line" and "on line". Off line uses a switch to change from mains to battery operation, thus there can be a short break in the output. On-line UPSs are a type where the converter is always working; hence there is no switch over break at the output.

URL (Uniform Resource Locator) - An "address" on the network.

**URN** (Unique Reference Number) - As issued for each security system by the Police.

USB (Universal Serial Bus) - A plug-and-play interface between a computer and peripheral devices (scanners, printers etc).

**USB 2.0** - Also referred to as Hi-Speed USB, USB 2.0 is an external bus that supports data rates up to 480Mbps. USB 2.0 is an extension of USB 1.1. USB 2.0 is fully compatible with USB 1.1 and uses the same cables and connectors. Hewlett-Packard, Intel, Lucent, Microsoft, NEC and Philips jointly led the initiative to develop a higher data transfer rate than the 1.1 specification to meet the bandwidth demands of developing technologies. The USB 2.0 specification was released in April 2000.



UTC - Up The Coax transmission.

UTP (Unshielded Twisted Pair) - A cable medium with one or more pairs of twisted insulated copper conductors bound in a single sheath, with no overall or individual screen. Now the most common method of bringing telephone signals and data to the desktop.

Varifocal - A type of lens which enables a manual selection between two focal lengths to give the desired picture view.

VBS (Video, Burst, Sync) - A composite colour video signal.

Verification - The means of verifying that an intrusion has taken place. Can be via audio, visual or sequential means.

Vertical Interval Switching - Sequential switchers waiting until the current field has finished before they display the next camera, even though the dwell time has elapsed.

**VESA** (Video Electronics Standard Association) - A group of standards developed for the purpose of defining video resolutions greater than

VHS (Video Home System) - Name given to 1/2" tape format domestic

Video - Visual or picture information. The translation of moving or still images into electrical signals. The Red, Green, Blue and Sync are separate electrical signals in computer video. In VHS video, Red, Green, Blue and Sync are all in one signal. In S-VHS video, the Red, Green, Blue and Sync are separate.

Video Motion Detection (VMD) - A system that uses the video signal from a camera to determine if there is any movement in the picture and set of an alarm.

Viewing Angle - The angle at which a person is able to stand in regard to an image and still be able to see the entire image without distortion. The typical viewing angle of plasma displays is 160°.

VLAN (Virtual LAN) - Devices on a LAN or LANs that are configured for communications as if they were attached to the same wire, when in reality they are located on a number of different LAN segments.

**VPN** (Virtual Private Network) - This creates a secure "tunnel" between the points within the VPN. Only devices with the correct "key" will be able to work within the VPN.

VS (Video Sync) - A composite monochrome video signal.

WAN (Wide Area Network) - A data-communications network spread across a wide geographic area and incorporating a large number of users. A WAN often uses transmission devices provided by common carriers. Examples of WANs include Frame Relay, SMDS and X.25.

Watt - A unit of power or activity equal to 107 CGS units of power, or to work done at the rate of one joule a second. An English horsepower is approximately equal to 746 Watts.

Wavelets™ - A suite of digital compression tools that is becoming popular in the CCTV industry, giving good picture quality at higher compression rates.

WDR - A camera with Wide Dynamic Range WDR is able to operate in variable light conditions (known as lux levels). Wide Dynamic Range is now a key security camera specification especially when the camera is viewing an area of difficult lighting conditions.

Web Server - A Web Server is a program, which allows Web browsers to retrieve files from computers connected to the Internet. The Web server listens for requests from Web browsers and upon receiving a request for a file sends it back to the browser

White Balance - An electronic process used in video cameras to retain true colours. It is performed electronically and is set on the basis of a white object in the picture.

Windows - Graphical user interface.

W-LAN (Wireless LAN) - A wireless LAN is a wireless local area network that uses radio waves as its carrier; where the network connections for end-users are wireless.

Y - The black and white video signal.

Y/C - A method of sending video pictures in 2 separate parts down 2 separate cables. The component parts are Y (the black and white portion) and C (the colour portion).

**Zone** - Identity of detection device(s) connected to an Intruder alarm

**Zoom** - To enlarge or reduce the size of an image primarily by varying lens focal length.



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