V5

VISTA

Flexibility by Design™

VISTA AT A GLANCE
FLEXIBILITY BY DESIGN™

V5

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.

VISTA

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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.

CONTENTS

VISTA
Flexibility by Design™

BOX CAMERAS

COLOUR MONO

VPC604CM	0479000	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), 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, 70x60x124.5mm
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 NIGHT

VPC5-700DNE	0479150	True Day Night, 1/3", 700TVL, 0.15/0.01 lux, DD, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, RAL7035 (cool grey) case, 4W (550mA), 230VAC, 70x60x124.5mm
VPC5-704DNE	0478860	True Day Night, 1/3", 700TVL, 0.15/0.01 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 NIGHT DWDR WITH ANALYTICS

VPC5-700DNS	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
VPC5-704DNS	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

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


VPC604CM
(0479000)

ANALOGUE CAMERAS

BOX CAMERAS

	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
COLOUR MONO																			
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 NIGHT																			
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

FOR INFORMATION ON OUR PSU RANGE PLEASE REFER TO PAGE 104
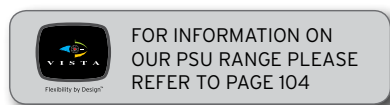
VPC5 SERIES

KEY FEATURES – VPC5 SERIES

HIGH RESOLUTION IMAGING
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)

ADVANCED PROCESSING
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

VB1B
(0032650)

VB1W
(0032630)

VB2W
(0325310)

VB2B
(0032670)

VCMB
(0033110)

ANALOGUE CAMERAS

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

ANALOGUE CAMERAS

BULLET CAMERAS

COLOUR MONO LED

VBC300	0471610	Colour Mono, 1/3", 420TVL, 0.1/0 lux, 4.6mm, EI, 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, EI, 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 **NEW** HD	0479740	True Day Night, 1/3", 960H (700TVL), 0.15/0 lux, 2.8-12mm, DD, OSD, DWDR/ATR, 2DNR, 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
VBC5V50DN960H **NEW** HD	0479730	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

VBC502-960H **NEW** HD	0480160	True Day Night, 1/3", 960H (700TVL), 0.15/0 lux, 2.8-12mm, DD, OSD, DWDR/ATR, 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 **NEW** HD	0480170	True Day Night, 1/3", 960H (700TVL), 0.25/0 lux, 5-50mm, DD, OSD, DWDR/ATR, 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

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)

Flexibility by Design™

BULLET CAMERAS

HD 960H

	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
COLOUR MONOLED																
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
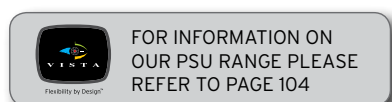
VBC-DN960H Series

ANALOGUE CAMERAS

BULLET CAMERAS

KEY FEATURES – VBCDN960H

HIGH RESOLUTION 960H IMAGING
Provides class leading 700TVL resolution colour and monochrome images to deliver maximum scene detail

TRUE DAY/NIGHT OPERATION
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

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

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

Camera	5	10	15	20	25	30	35	40	45	50	55	60
VBC300	■											
VBC301-600	■	■	■									
VBC400-600	■	■	■	■								
VBC28V12DN960H	■	■	■	■	■	■	■	■	■			
VBC5V50DN960H	■	■	■	■	■	■	■	■	■			
VBC502-960H	■	■	■	■	■	■	■	■	■			
VBC503-960H	■	■	■	■	■	■	■	■	■			
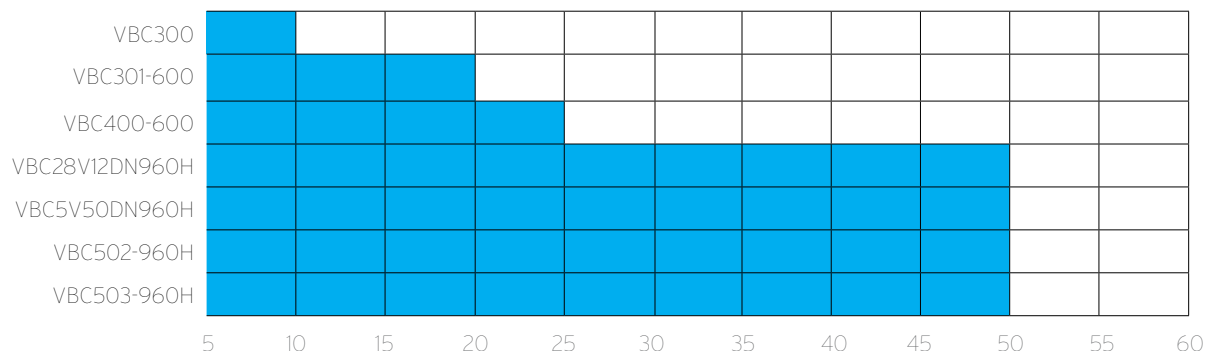
ANALOGUE CAMERAS

BULLET CAMERAS – VBC502/503-960H FEATURES CHART

SIMPLE SET-UP VIA POWERFUL OSD

1M CONNECTION CABLE TO FIT THROUGH WALLS AND SOFFITS

DIGITAL NOISE REDUCTION (2DNR) FOR CLEANER LOW LIGHT IMAGES

FULLY CABLE MANAGED BRACKET WITH 3 AXIS ADJUSTMENT

DIGITAL WIDE DYNAMIC RANGE (ATR) FOR HIGH CONTRAST SCENES

SERVICE JACK (SERVICE LEAD PROVIDED) FOR EASY SET-UP

PRIVACY ZONES & MOTION DETECTION AS STANDARD

DUAL EXTERNAL MOUNTED IR PODS, EASILY ANGLED TO GIVE CORRECT COVERAGE

70 (35 PER POD) 850NM IR LEDS PROVIDE COVERAGE > 80M

EXTERNALLY ADJUSTED ZOOM AND FOCUS CONTROLS ON UNDERSIDE

960H (700TVL) IMAGES

EXTERNALLY MOUNTED IR PODS, ENSURE IT CAN BE USED IN BS8418:2010 COMPLIANT CCTV SYSTEMS

ANALOGUE CAMERAS

INTEGRATED ZOOM CAMERA

INTERNAL

|		
VZM22INT600	0478720	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) 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.

FOR INFORMATION ON OUR PSU RANGE PLEASE REFER TO PAGE 104
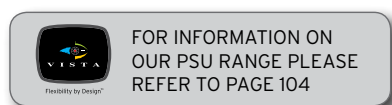
VZM22X-EXT
(0325230)

VZM22XDN-INT
(0444960)

VZM22/REM
(0350110)

ANALOGUE CAMERAS

VISTA

Flexibility by Design™

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

HIGH RESOLUTION
600TVL colour and monochrome resolution deliver maximum scene detail

22:1 ZOOM LENS
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 0lux

INTEGRAL 3.6MM LENS
High-quality wide-angle lens provides 63º 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

COLOUR MONO 760H (600TVL)

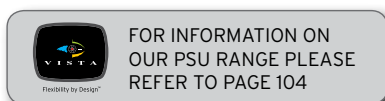|		
VFD28V12CM760H-BCB **NEW**	0497760	Colour Mono, 1/3", 760H (600TVL), 0.2 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, PWI, motion detection, privacy zones, black housing, clear bubble, black liner, 1.3W, (110mA), 12VDC, 101.2x80.5mm
VFD28V12CM760H-BSB **NEW**	0497770	Colour Mono, 1/3", 760H (600TVL), 0.2 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, PWI, motion detection, privacy zones, black housing, smoked bubble, black liner, 1.3W (110mA), 12VDC, 101.2x80.5mm
VFD28V12CM760H-WCW **NEW**	0497780	Colour Mono, 1/3", 760H (600TVL), 0.2 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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 **NEW** HD	0497790	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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 **NEW** HD	0497800	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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 **NEW** HD	0497810	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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 **NEW** HD	0497820	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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 **NEW** HD	0497830	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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 **NEW** HD	0498060	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR/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 UTP video

VFD28V12CM960HU-BCB **NEW** HD	0497840	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, UTP video, black housing, clear bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm
VFD28V12CM960HU-BSB **NEW** HD	0497850	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, UTP video, black housing, smoked bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm
VFD28V12CM960HU-WCW **NEW** HD	0497860	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, DWDR/ATR, DNR, AGC, BLC, PWI, motion detection, privacy zones, IR optimser, UTP video, white housing, clear bubble, white liner, 1.5W (125mA), 12VDC, 101.2x80.5mm
VFD28V12CM960HU-WSB **NEW** HD	0497870	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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

ANALOGUE FIXED DOMES

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
VFD28V12CM760H-BCB	600 (760H)	0.2	2.8-12	•	•	•	•	•	•	•			Black	Clear	Black	12V
VFD28V12CM760H-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
VFD28V12CM960H-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
VFD28V12CM960H-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																
VFD28V12DN960H-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

Flexibility by Design™

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 conditions

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

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

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

VFD FAMILY
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)

ANALOGUE FIXED DOMES

FIXED DOMES - INTERNAL - VFD RANGE

TRUE DAY NIGHT 960H (700TVL)

VFD28V12DN960H-BCB **NEW** HD	0497880	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, motion detection, privacy zones, IR optimser, black housing, clear bubble, black liner, 1.5W (125mA), 12VDC, 101.2x80.5mm
VFD28V12DN960H-WCW **NEW** HD	0497890	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, 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

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

FOR INFORMATION ON OUR BRACKET RANGE PLEASE REFER TO PAGE 110 & 111
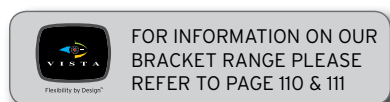
VFD/VVRD service lead
(0498370)

ANALOGUE FIXED DOMES

FIXED DOMES - INTERNAL - VFDA RANGE

COLOUR MONO 960H (700TVL)

VFDA28V12CM960H24-BSB **NEW** HD	0498100	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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 **NEW** HD	0498110	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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 **NEW** HD	0498650	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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 **NEW** HD	0498120	Colour Mono, 1/3", 960H (700TVL) 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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 **NEW** HD	0498130	Colour Mono, 1/3", 960H (700TVL), 0.25 lux, 2.8-12mm, DD, 3-Axis, service jack, OSD, 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

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

KEY FEATURES - VFDA-960H

HIGH RESOLUTION 960H IMAGING
Provides class leading 700TVL resolution colour and monochrome images to deliver maximum scene detail
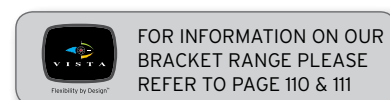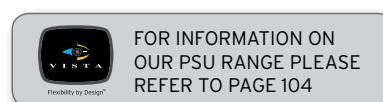
ADVANCED PROCESSING
With 2DNR, ATR (Adaptive Tone Reproduction - which helps to balance the image in widely contrasting scenes of view), BLC and Peak White Inversion, it ensures that a majority of lighting conditions can be resolved

PROTECTING SENSITIVE AND PERSONAL INFORMATION
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

ANALOGUE FIXED DOMES

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

ANALOGUE FIXED DOMES

FIXED DOMES - VANDAL RESISTANT - VVRD RANGE

COLOUR MONO

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), 12VDC/24VAC, 144x94mm, IP66 (IK10)
VVRD28V12CM-760H NEW	0497920	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 NEW HD	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 optimiser, RAL7035 (cool grey) housing, clear bubble, 2W (170mA) @ 12VDC, 3W (125mA) @ 24VAC, 144x94.5mm, IP66 (IK10)
VVRD28V12CM-960HU NEW HD	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 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 NEW HD	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 NEW HD	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 optimiser, UTP video, RAL7035 (cool grey) housing, clear bubble, 2W (170mA)@ 12VDC, 3W (125mA) @ 24VAC, 144x94.5mm, IP66 (IK10)

TRUE DAY NIGHT LED

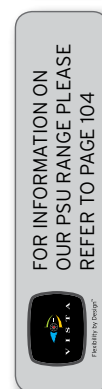|		
VVRD4V9DNLED-580/B	0496690	True Day Night, 1/3", 580/600TVL, 0.44/0 lux (0.0017 lux slow shutter), sense-up, 4-9mm, DD, 3-Axis, service jack, OSD, DWDR, DNR, AGC, BLC, flickerless, PWI, motion detection, privacy zones, motion output, 23 LEDs, up to 25m range, black housing, clear bubble, 2.5W (208mA), 12VDC/24VAC, 144x94mm, IP66 (IK10)
VVRD28V12DNLED-760H 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 NEW HD	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 NEW HD	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)

HD 960H

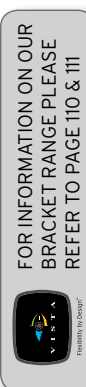## FIXED DOMES – VANDAL RESISTANT – VVRD RANGE

Model	RESOLUTION (TVL)	SENSITIVITY (LUX)	SLOW SHUTTER (LUX)	SENSE UP	LENS (mm)	3-AXIS	SERVICE JACK	DWDR/ATR	BLC	PWI	MOTION DETECTION	PRIVACY ZONES	ANALYTICS	NO OF IR LED'S	IR DISTANCE (m)	SMART IR	IR OPTIMISER	MOTION OUTPUT	EXTERNAL DN INPUT	RS485	UTP VIDEO	HOUSING COLOUR	BUBBLE COLOUR	VOLTAGE	IP RATING	VANDAL RESISTANCE
COLOUR MONO																										
VVRD4V9CM-580/B	580	0.39	0.0015	•	4-9	•	•	•	•	•	•	•						•				Black	Clear	12/24V	IP66	IK10
VVRD28V12CM-760H	600 (760H)	0.2			2.8-12	•	•	•	•	•	•	•										RAL7035 (cool grey)	Clear	12/24V	IP66	IK10
VVRD28V12CM-960H	700 (960H)	0.25			2.8-12	•	•	•	•	•	•	•					•					RAL7035 (cool grey)	Clear	12/24V	IP66	IK10
VVRD28V12CM-960HU	700 (960H)	0.25			2.8-12	•	•	•	•	•	•	•					•				•	RAL7035 (cool grey)	Clear	12/24V	IP66	IK10
TRUE DAY NIGHT																										
VVRD4V9DN-580/B	580/600	0.39/0.039	0.0015	•	4-9	•	•	•	•	•	•	•						•				Black	Clear	12/24V	IP66	IK10
VVRD28V12DN-760H	600 (760H)	0.2/0.02			2.8-12	•	•	•	•	•	•	•										RAL7035 (cool grey)	Clear	12/24V	IP66	IK10
VVRD28V12DN-960H	700 (960H)	0.25/0.02			2.8-12	•	•	•	•	•	•	•					•					RAL7035 (cool grey)	Clear	12/24V	IP66	IK10
VVRD28V12DN-960HU	700 (960H)	0.25/0.02			2.8-12	•	•	•	•	•	•	•					•				•	RAL7035 (cool grey)	Clear	12/24V	IP66	IK10
VVRD28V12DN-650	650	0.4/0.04	0.001	•	2.8-12	•	•	•	•	•	•	•	•					•	•	•		RAL7035 (cool grey)	Clear	12/24V	IP66	IK10
VVRD22ZM600	600	0.5/0.05	0.001	•	x22 Zoom			•	•	•	•	•						•	•	•		RAL7035 (cool grey)	Clear	12/24V	IP66	IK10
TRUE DAY NIGHT LED																										
VVRD4V9DNLED-580/B	580/600	0.44/0	0.0017	•	4-9	•	•	•	•	•	•	•		23	25			•				Black	Clear	12/24V	IP66	IK10
VVRD28V12DNLED-760H	600 (760H)	0.2/0			2.8-12	•	•	•	•	•	•	•		16	20							RAL7035 (cool grey)	Clear	12/24V	IP66	IK10
VVRD28V12DNLED-960H	700 (960H)	0.25/0			2.8-12	•	•	•	•	•	•	•		16	20	•						RAL7035 (cool grey)	Clear	12/24V	IP66	IK10
VVRD28V12DNLED-960HU	700 (960H)	0.25/0			2.8-12	•	•	•	•	•	•	•		16	20	•					•	RAL7035 (cool grey)	Clear	12/24V	IP66	IK10

FOR INFORMATION ON OUR BRACKET RANGE PLEASE REFER TO PAGE 110 & 111

FOR INFORMATION ON OUR PSU RANGE PLEASE REFER TO PAGE 104

ANALOGUE FIXED DOMES

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

HIGH RESOLUTION 960H IMAGING
Provides class leading 700TVL resolution colour and monochrome images to deliver maximum scene detail

COLOUR/MONOCHROME OPERATION
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

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 (0 lux) up to a distance of 20m (dependent on reflective scene content)

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

VVRD-DNLED DOME

ANALOGUE FIXED DOMES
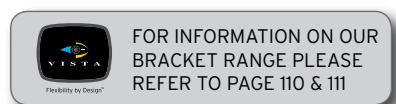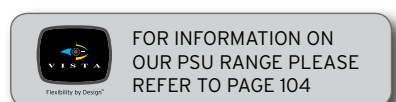
FIXED DOMES - VANDAL RESISTANT - VVRD RANGE

DUMMY

VVRD-D	0499110	Dummy dome, RAL7035 (cool grey) housing, smoked bubble, black liner, 144x94mm

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)
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, 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

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

FOR INFORMATION ON OUR PSU RANGE PLEASE REFER TO PAGE 104

FOR INFORMATION ON OUR BRACKET RANGE PLEASE REFER TO PAGE 110 & 111

POWERDOME LITE

SURFACE/WALL/PENDANT 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 MOUNT - INCLUDES 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

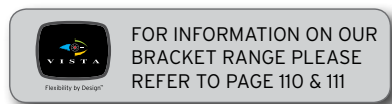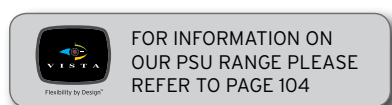|		
VVRD/VPL7-SPACER	0498380	Ceiling spacer for VVRD, VPL600eco, VPL7-WP-SM, VK2-VRD, VK2-600PTZ & Eclipse2, RAL7035 (cool grey), 3/4 NPT side conduit hole, 146x38mm
VPL-SM-FM	0497090	False ceiling mount kit for VPL7-WP-SM, RAL7035 (cool grey)
VVRD-EWMB1	0479030	Wall bracket (low profile) for VVRD, VPL600eco, 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

FOR INFORMATION ON OUR PSU RANGE PLEASE REFER TO PAGE 104

FOR INFORMATION ON OUR BRACKET RANGE PLEASE REFER TO PAGE 110 & 111

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

120 PRESETS
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

HD
960H

KEY FEATURES – VPL7

HIGH RESOLUTION
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)
TELEMETRY**
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	700TVL	
Sensitivity	0.5/0.05 lux	0.1/0.01/0.00001 lux	
Optical Zoom	22:1	22:1	
Digital Zoom	x16	x16	
Focal Length	3.9-85.8mm	3.9-85.8mm	
FSK Protocol	N/A	Vista	
RS485 Protocol	Vista, Pelco P & D	Vista, Pelco P & D	
Max Pan/Tilt Speed	0.1 -240°/s	0.1 -380°/s	
Pan Angle	0-360°	0-360°	
Presets	120 with titles	120 with titles	
Preset Tours	4 with titles	4 with titles	
Learn Tours	No	4 with titles	
Areas	8 with titles	8 with titles	
Privacy Zones	No	4	
Motion Detection (Preset)	Yes		
AutoPan/Scan	1 with titles	1/4 with titles	
Home Position	Preset, Preset Tour or AutoScan	Preset, Preset Tour, Learn 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 45W for heater/fan)
Voltage	12VDC	12VDC/24VAC	Dome 12VDC/24VAC, Heater requires 24VAC
IP Rating	N/A	IP66	
Vandal resistance	N/A	IK10	

ANALOGUE FULLY FUNCTIONAL DOMES

POWERDOME^{PRO}

INTERNAL FLUSH CEILING MOUNT

VPP-H22C-DF-C	0451570	Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, clear bubble with white trim, 15W (1.25A/625mA), 24VAC, PSU included, 251x204mm
VPP-H22C-DF-S	0451590	Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, smoked bubble 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, clear 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, 251x204mm
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, 251x204mm
VPP-H35D-DF-C	0452520	True Day Night, 1/4", 540TVL, 0.5 lux, 35x optical zoom, RS485 or coax telemetry, clear 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, 251x204mm
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, 251x204mm

INTERNAL SURFACE MOUNT

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, white 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/PENDANT 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
VPP-H22C-DP-S	0451620	Colour, 1/4", 460TVL, 1 lux, 22x optical zoom, RS485 or coax telemetry, RAL7035 (cool grey) dome, smoked bubble, 15W (1.25A/625mA), 24VAC, PSU included, 308x218mm, requires bracket

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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

FLUSH CEILING MOUNT

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 (cool grey) 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, IP66, 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 VANDAL RESISTANT WALL/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 telemetry, RAL7035 (cool grey) dome, smoked bubble, 65W (5.5A/2.75A), 24VAC, 308x218mm, IP66 (IK10), requires PSU & bracket

ANALOGUE FULLY FUNCTIONAL DOMES

POWERDOME^{PRO}

BLACK EXTERNAL DOME HOUSING - REQUIRES CAMERA MODULE

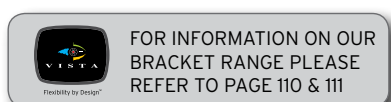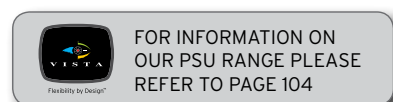|		
VPP-O-WP-C/B	0470920	VPP external black dome housing, clear bubble, 24VAC, 308x218mm, requires camera module, PSU & bracket
VPP-O-WV-C/B	0470930	VPP external vandal resistant, black dome housing, smoked bubble, 24VAC, 308x218mm, requires camera module, PSU & bracket, (IK10)

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

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	0452240	Dummy internal pendant/wall mount VPP dome, RAL7035 (cool grey) dome, smoked bubble, requires bracket
VPP-DUMMY-WP-S	0452230	Dummy external VPP dome, RAL7035 (cool grey) dome, smoked bubble, requires bracket

BRACKETS

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)

FOR INFORMATION ON OUR PSU RANGE PLEASE REFER TO PAGE 104

FOR INFORMATION ON OUR BRACKET RANGE PLEASE REFER TO PAGE 110 & 111

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 VPP
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

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POWERDOME^{PRO} LENS RANGE COMPARISON

The following table shows the differences between the various lens options on the Vista PowerDome^{PRO} 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

1/3" 18:1 (4.7 - 84.6mm)

1/4" 22:1 (4.0 - 88mm)

1/4" 30:1 (3.5 - 102mm)

1/4" 35:1 (3.4 - 119mm)
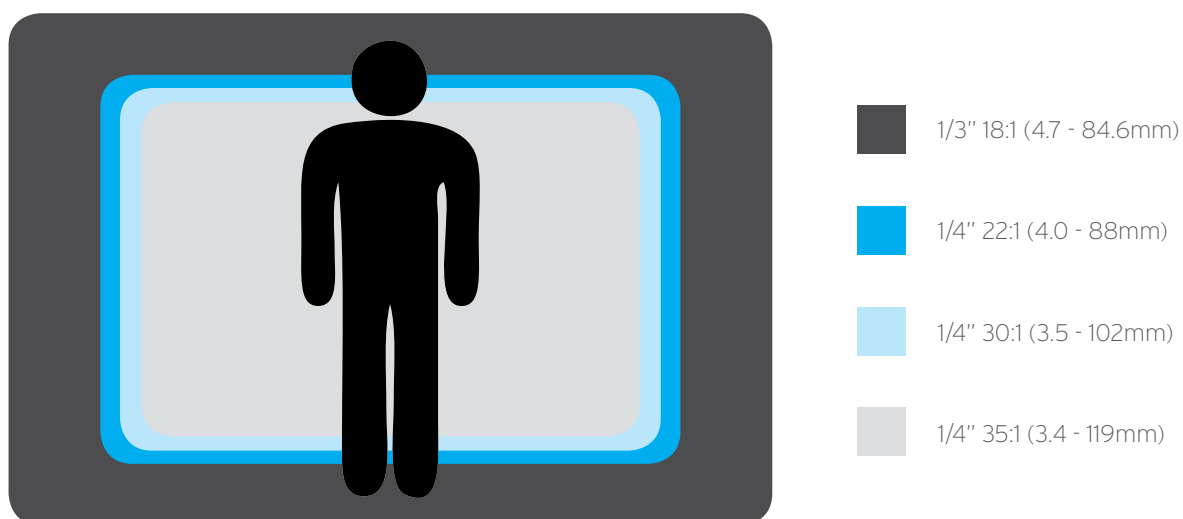
The rectangles above show how much of a 1.8m tall person would be viewed at a 50m range if the dome is zoomed in to its full extent.
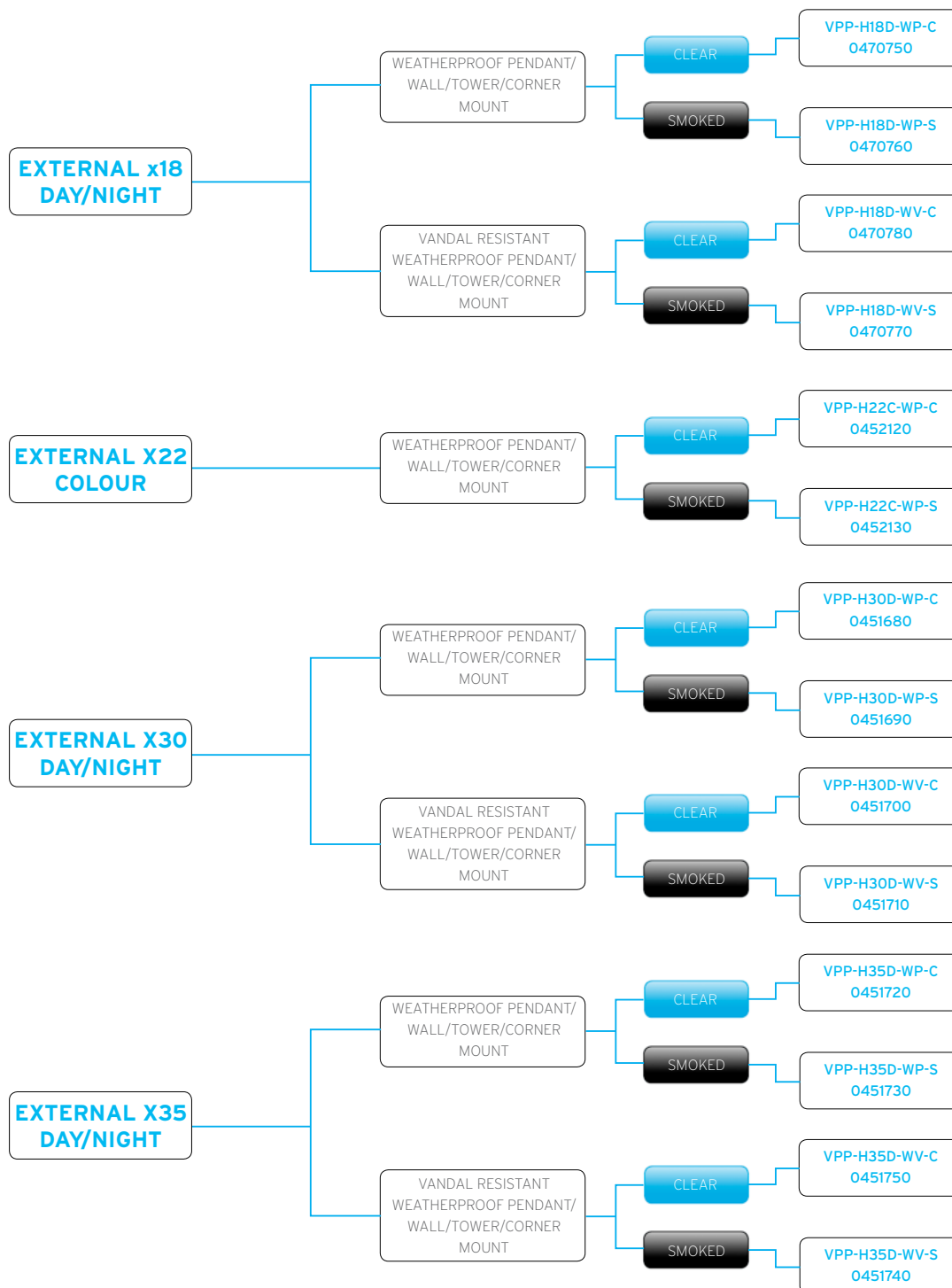
ANALOGUE FULLY FUNCTIONAL DOMES

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POWERDOME^PRO CONFIGURATOR - INTERNAL DOMES

INTERNAL X22 COLOUR

FLUSH/CEILING MOUNT
- CLEAR → VPP-H22C-DF-C 0451570
- SMOKED → VPP-H22C-DF-S 0451590
- CHROME → VPP-H22C-DF-CH 0451600

SURFACE MOUNT
- CLEAR → VPP-H22C-SM-C 0452330
- SMOKED → VPP-H22C-SM-S 0452340
- CHROME → VPP-H22C-SM-CH 0452350

PENDANT/WALL MOUNT
- CLEAR → VPP-H22C-DP-C 0451610
- SMOKED → VPP-H22C-DP-S 0451620
- CHROME → VPP-H22C-DP-CH 0451630

INTERNAL X30 DAY/NIGHT

FLUSH/CEILING MOUNT
- CLEAR → VPP-H30D-DF-C 0452460
- SMOKED → VPP-H30D-DF-S 0452470
- CHROME → VPP-H30D-DF-CH 0452480

SURFACE MOUNT
- CLEAR → VPP-H30D-SM-C 0452410
- SMOKED → VPP-H30D-SM-S 0452400
- CHROME → VPP-H30D-SM-CH 0452420

PENDANT/WALL MOUNT
- CLEAR → VPP-H30D-DP-C 0452430
- SMOKED → VPP-H30D-DP-S 0452440
- CHROME → VPP-H30D-DP-CH 0452450

POWERDOME^{PRO} CONFIGURATOR - INTERNAL DOMES

INTERNAL X35 DAY/NIGHT	FLUSH/CEILING MOUNT	CLEAR	VPP-H35D-DF-C 0452520
		SMOKED	VPP-H35D-DF-S 0452530
		CHROME	VPP-H35D-DF-CH 0452540
	SURFACE MOUNT	CLEAR	VPP-H35D-SM-C 0452500
		SMOKED	VPP-H35D-SM-S 0452490
		CHROME	VPP-H35D-SM-CH 0452510
	PENDANT/WALL MOUNT	CLEAR	VPP-H35D-DP-C 0452560
		SMOKED	VPP-H35D-DP-S 0452550
		CHROME	VPP-H35D-DP-CH 0452570

ANALOGUE FULLY FUNCTIONAL DOMES

POWERDOME^{PRO} CONFIGURATOR - EXTERNAL DOMES

EXTERNAL x18 DAY/NIGHT
- WEATHERPROOF PENDANT/ WALL/TOWER/CORNER MOUNT
  - CLEAR → VPP-H18D-WP-C 0470750
  - SMOKED → VPP-H18D-WP-S 0470760
- VANDAL RESISTANT WEATHERPROOF PENDANT/ WALL/TOWER/CORNER MOUNT
  - CLEAR → VPP-H18D-WV-C 0470780
  - SMOKED → VPP-H18D-WV-S 0470770

EXTERNAL X22 COLOUR
- WEATHERPROOF PENDANT/ WALL/TOWER/CORNER MOUNT
  - CLEAR → VPP-H22C-WP-C 0452120
  - SMOKED → VPP-H22C-WP-S 0452130

EXTERNAL X30 DAY/NIGHT
- WEATHERPROOF PENDANT/ WALL/TOWER/CORNER MOUNT
  - CLEAR → VPP-H30D-WP-C 0451680
  - SMOKED → VPP-H30D-WP-S 0451690
- VANDAL RESISTANT WEATHERPROOF PENDANT/ WALL/TOWER/CORNER MOUNT
  - CLEAR → VPP-H30D-WV-C 0451700
  - SMOKED → VPP-H30D-WV-S 0451710

EXTERNAL X35 DAY/NIGHT
- WEATHERPROOF PENDANT/ WALL/TOWER/CORNER MOUNT
  - CLEAR → VPP-H35D-WP-C 0451720
  - SMOKED → VPP-H35D-WP-S 0451730
- VANDAL RESISTANT WEATHERPROOF PENDANT/ WALL/TOWER/CORNER MOUNT
  - CLEAR → VPP-H35D-WV-C 0451750
  - SMOKED → VPP-H35D-WV-S 0451740

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POWERDOME^PRO 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 Pelco optional PCB	Vista as standard, BBV and Pelco optional PCB	Vista as standard, BBV and Pelco optional PCB	Vista as standard, BBV and Pelco optional PCB
RS485 Protocol	Vista, Pelco P & D as standard, AD Manchester & Phillips optional PCB	Vista, Pelco P & D as standard, AD Manchester & Phillips optional PCB	Vista, Pelco P & D as standard, AD Manchester & Phillips optional PCB	Vista, Pelco P & D as standard, AD Manchester & 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 Tour or AutoPan	Preset, Preset Tour, Learn Tour or AutoPan	Preset, Preset Tour, Learn Tour or AutoPan	Preset, Preset Tour, Learn Tour or AutoPan
Time and Date	Yes	Yes	Yes	Yes
Scheduled Commands	8 fully programmable - Preset, Preset Tour, Learn Tour or AutoPan	8 fully programmable - Preset, Preset Tour, Learn Tour or AutoPan	8 fully programmable - Preset, Preset Tour, Learn Tour or AutoPan	8 fully programmable - Preset, Preset Tour, Learn 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 Housing	No	Optional (IK10)	Optional (IK10)	Optional (IK10)
Internal Lower Bubble	Clear, Smoked, Chrome or Gold options	N/A	Clear, Smoked, Chrome or Gold option	Clear, Smoked, Chrome or 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	15W, 65W with heater	15W, 65W with heater	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 dome

IP CAMERAS

COMPACT CAMERAS

VK2-2MPCCW **NEW**	0474680	Colour Mono 1/4", 2MP (1600x1200) 4:3, 0.6 lux, 2.6mm, H.264/MJPEG, triple 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 **NEW**	0474670	Colour Mono 1/4", 2MP (1600x1200) 4:3, 0 lux, 2.6mm, H.264/MJPEG, triple streaming, 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

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

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

PIR DETECTION
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 card,

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 CAMERAS

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

H.264 COMPRESSION
Highly efficient compression for top quality images at low bandwidth, ›25% more efficient than MPEG4.

POE
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) RESOLUTION

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) RESOLUTION

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) RESOLUTION

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 (1920X1080p) RESOLUTION

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 DRIVE

VDD24V612P-MP	0471010	1/3", CS, 2.4-6.0mm, F1.2-360, DD, plugged, 23cm lead, MEGA-PIXEL
VDD31V812IRP-3MP	0478870	1/2.7", CS, 3.1-8.0mm, F1.2-360, DD, plugged, 12cm lead, 3 MEGA-PIXEL

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

TRUE DAY NIGHT WITH DUAL LED

IP CAMERAS

BOX CAMERAS

	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
COLOUR MONO															
VK2-VGABX	VGA (640x480) 4:3	1.0		Dual	25 @ VGA	Micro SD				•	•		•	Silver	PoE/12V
VK2-2MPBX(CM)	2MP (1600x1200) 4:3	0.6	•	Quad	25 @ 2MP	SD		•		•	•	•	•	Silver	PoE/12/24V
TRUE DAY NIGHT															
VK2-540BX	D1 (720x576) 4:3	0.25/0.01	•	Dual	25 @ D1		•	•	•	•	•		•	RAL7035 (cool grey)	PoE/12/24V
VK2-2MPBX(DN)	2MP (1600x1200) 4:3	0.6	•	Quad	25 @ 2MP	SD		•		•	•	•	•	Silver	PoE/12/24V
VK2-1080BX(DN)	Full HD (1920x1080p) 16:9	0.09/0.02	•	Quad	25 @ 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 COMPLIANT
ONVIF compliance assures seamless integration to third party devices

POE EQUIPPED
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

SD CARD SLOT
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)

IP CAMERAS

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 & 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 devices

IN-BUILT IR LEDS
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 any installation

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)

IP CAMERAS

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

VK2-720VZMI
(0473550)

VK2-720VZMX
(0473560)

KEY FEATURES – VK2-720VZM

1.3MP IMAGERY
Megapixel technology affords large scene coverage and ultimate detail for retrospective review

POE EQUIPPED
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 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

18:1 ZOOM LENS
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

DUAL STANDARD
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

IP CAMERAS

360° CAMERAS

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

4 x VIEW

De-warped (ePTZ)

IP CAMERAS

360° CAMERAS

FOR INFORMATION ON OUR
BRACKET RANGE PLEASE
REFER TO PAGE 110 & 111
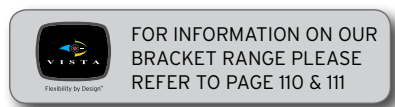
Fisheye

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
remain private

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

VGA (640x480) RESOLUTION

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
VK2-VGAVFD/WCW	0473070	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, white housing, clear bubble, white liner, 4W (333mA), PoE/12VDC, 119x105mm, software included

D1 (720x576) RESOLUTION

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

POE EQUIPPED
Using the latest PoE technology, cameras can be powered 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 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)

ONVIF CERTIFICATION
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

VISTA
Flexibility by Design™

FIXED DOMES - INTERNAL

COLOUR MONO	RESOLUTION	SENSITIVITY (LUX)	LENS (mm)	ANALOGUE OUTPUT	STREAMING	IPS	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 (640x480) 4:3	1.0	2.8-12		Triple	25@VGA	Micro SD	•		•	•	•	Black	Clear	Black	PoE/12V
VK2-VGAVFD/WCW	VGA (640x480) 4:3	1.0	2.8-12		Triple	25@VGA	Micro SD	•		•	•	•	White	Clear	White	PoE/12V
VK2-540VFD/BCB	D1 (720x576) 4:3	1.0	2.8-12	•	Dual	25@D1	Micro SD	•		•	•	•	Black	Clear	Black	PoE/12V
VK2-540VFD/WCW	D1 (720x576) 4:3	1.0	2.8-12	•	Dual	25@D1	Micro SD	•		•	•	•	White	Clear	White	PoE/12V
VK2-1080VFD/BCB	Full HD (1920x1080p) 16:9	2.5/0.2	3-9	•	Triple	25@1080p	Micro SD	•	•	•	•	•	Black	Clear	Black	PoE/12V
VK2-1080VFD/WCW	Full HD (1920x1080p) 16:9	2.5/0.2	3-9	•	Triple	25@1080p	Micro SD	•	•	•	•	•	White	Clear	White	PoE/12V

DUMMY

VFDAS-BSB-D	0471420	Dummy VK2-VFD dome, black housing, smoked bubble, black liner, 119x105mm
VFDAS-WCW-D	0471430	Dummy VK2-VFD dome, white housing, clear bubble, white liner, 119x105mm

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
VFDAS-IPMA	0496980	Pole mount adaptor for VK2-VFD, requires VDM-2MP and either VDM-IPMCA or VDM-IPMGA, RAL7035 (cool grey)

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
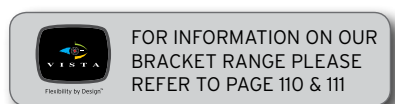
IP FIXED DOMES

FIXED DOMES - VANDAL RESISTANT

D1 (720x576) RESOLUTION

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 (1920X1080p) RESOLUTION

VK2-1080VRD3V9 **NEW**	0474620	True Day Night, 1/2.8'', 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, 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, 154x120mm, IP66 (IK10), software included
VK2-1080VRDIR3V9F **NEW**	0474600	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, 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), 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 COMPLIANT
ONVIF compliance allows seamless integration to third party devices

POE EQUIPPED
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 FLEXIBILITY
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

ON-BOARD RECORDING
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)

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

VK2-1080VRD3V9
(0474620)

VK2-1080VRDIR3V9F
(0474600)

IP FIXED DOMES

FIXED DOMES - VANDAL RESISTANT

	RESOLUTION	SENSITIVITY (LUX)	SENSE UP	LENS (mm)	MOTORISED REMOTE FOCUS/ZOOM	ANALOGUE OUTPUT	STREAMING	ips	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
TRUE DAY NIGHT																								
VK2-540VRD	D1 (720x576) 4:3	0.25/0.01	•	3-9		•	Dual	25ips @ D1		•		•	•	•	•	•		•			RAL7035 (cool grey)	Clear	PoE/ 12/24V	IP66 IK10
VK2-1080VRD3V9	Full HD (1920x1080p) 16:9	2.5/0.2		3-9		•	Triple	25ips @ 1080p	Micro SD	•	•	•	•		•	•	•	•			RAL7035 (cool grey)	Clear	PoE/ 12/24V	IP66 IK10
TRUE DAY NIGHT LED																								
VK2-1080VRDIR3V9F	Full HD (1920x1080p) 16:9	2.5/0	•	3-9	•	•	Triple	25ips @ 1080p	Micro SD	•	•	•	•		•	•	•	•	24	10	RAL7035 (cool grey)	Clear	PoE/ 12/24V	IP66 IK10

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-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 & SPARES

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

IP FULLY FUNCTIONAL DOMES

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

FOR INFORMATION ON OUR BRACKET RANGE PLEASE REFER TO PAGE 110 & 111
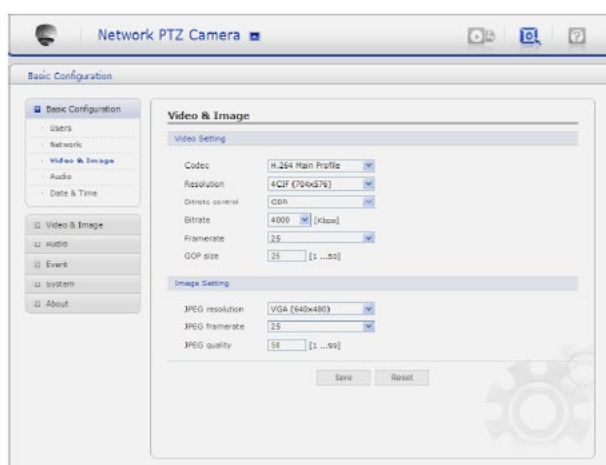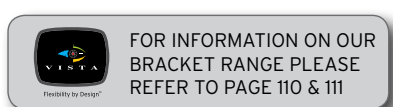
EAST TO NAVIGATE SETUP MENUS

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

DAY/NIGHT PERFORMANCE
True Day/Night operation means excellent low light performance

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

IP FULLY FUNCTIONAL DOMES

FULLY FUNCTIONAL DOMES - VANDAL RESISTANT

FULLY FUNCTIONAL

VK2-1080PTZ **NEW**	0498710	True Day Night, 1/2.8'', Full HD (1920x1080p) 16:9, 1.7/0.26 lux, 20x optical zoom, 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 **NEW**	0498730	Internal false ceiling mounting for VK2-1080PTZ
VK2-1080PTZHSG **NEW**	0498720	External housing with clear bubble for VK2-1080PTZ, includes heater, 53W (2.21A), 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

POE EQUIPPED
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

ENVIRONMENTAL
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

Flexibility by Design™

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 & SPARES

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

HARDWARE
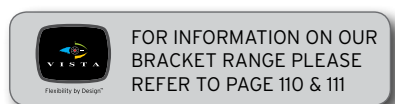
HOUSINGS

HOUSINGS - INTERNAL

VHI-11	0356950	MCL-270x80x70mm, Internal housing c/w bracket, RAL7035 (cool grey)

HOUSINGS - EXTERNAL

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

HARDWARE

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

ACCESSORIES & SPARES

WALK TESTER		Please contact Norbain for more information

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 range

VID DETECTOR

HARDWARE

IR LIGHTING

VIR-ZM1

VIR-ZM1 **NEW**	0479640	2-90°, 18-100m, 850nm, built-in photocell, black, 3.5W (350mA), requires PSU, 72x128x94mm, IP66

VIRSY2 SERIES

VIRSY2-S **NEW**	0479680	10-75°, 20-60m, 850nm, built-in photocell with following contact for TDN cameras, power output pot, black, 11W (900mA), requires PSU, 75x100x54mm, IP66
VIRSY2-M **NEW**	0479690	10-75°, 30-110m, 850nm, built-in photocell with following contact for TDN cameras, power output pot, black, 25W (2.5A), requires PSU, 13x100x65mm, IP66
VIRSY2-L **NEW**	0479700	10-75°, 45-200m, 850nm, built-in photocell with following contact for TDN cameras, 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 & SPARES

VIR300PC	0337710	Photocell c/w day/night switch for use with VIR300WF/WS, VIR50W and VIRLED IR lamps, IP66
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

	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
ZM1									
VIR-ZM1	2-90°	100m @ 2°		4	No	No	No	No	IP66
		18m @ 90°		28					
VIRSY2 SERIES									
VIRSY2-S	10/30/75°	60m @ 10°		11	Yes	Yes	Yes	Yes	IP66
		40m @ 30°		24					
		20m @ 75°		35					
VIRSY2-M	10/30/75°	110m @ 10°		20	Yes	Yes	Yes	Yes	IP66
		60m @ 30°		35					
		30m @ 75°		50					
VIRSY2-L	10/30/75°	200m @ 10°		36	Yes	Yes	Yes	Yes	IP66
		110m @ 30°		60					
		45m @ 75°		75					

VIRSY2-S
(0479680)

VIRSY2-M
(0479690)

VIRSY2-L
(0479700)

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

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/night 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)

HARDWARE

SWITCHERS & KEYBOARDS

DESKTOP

VSO42	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
VSO82	0315870	Switcher, 8 way 2 monitor, cream, 4.5W, 15VAC PSU included, 210x48x195mm
VSO82A	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

ERGONOMIC DESIGN
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

ANALOGUE RECORDING

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}

H.264 TECHNOLOGY
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

EASY 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

QUANTUM^{EVO} 4 CHANNEL NO DVD

QUANTUM^{EVO} 16 CHANNEL WITH DVD

TO ARCHIVE FOOTAGE FROM THE QUANTUM DVR YOU CAN EITHER USE A USB STICK, CD OR "DVD -" TYPE DISC.

ANALOGUE RECORDING

QUANTUM^{EVO}

QUANTUM^{EVO} MENU STRUCTURE

The Quantum^{Evo} 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.

QUANTUM^{EVO} REMOTE VIEWING SOFTWARE

If the Quantum^{Evo} 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^{Evo} units. Remote access to the Quantum^{Evo} set up menus is available if you have permitted access rights.

Q_REMOTE APP

CLIENT VIEWING SOFTWARE SUPPLIED FOC WITH THE QUANTUM^{EVO}

ANALOGUE RECORDING

QUANTUM^{PLUS} 960H

HD 960H
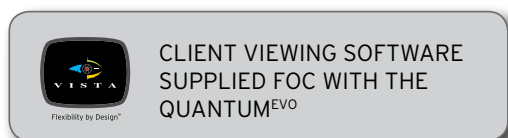
PLUS 960H

QP960H04-1TB **NEW** HD	0656440	4 channel, H.264, DVD, 400ips @ 960H, 1TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H04-2TB **NEW** HD	0656450	4 channel, H.264, DVD, 400ips @ 960H, 2TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H08-1TB **NEW** HD	0656790	8 channel, H.264, DVD, 400ips @ 960H, 1TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H08-2TB **NEW** HD	0656460	8 channel, H.264, DVD, 400ips @ 960H, 2TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H08-4TB **NEW** HD	0656470	8 channel, H.264, DVD, 400ips @ 960H, 4TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H08-6TB **NEW** HD	0656480	8 channel, H.264, DVD, 400ips @ 960H, 6TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H16-1TB **NEW** HD	0656490	16 channel, H.264, DVD, 400ips @ 960H, 1TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H16-2TB **NEW** HD	0658290	16 channel, H.264, DVD, 400ips @ 960H, 2TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H16-4TB **NEW** HD	0658300	16 channel, H.264, DVD, 400ips @ 960H, 4TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H16-6TB **NEW** HD	0656510	16 channel, H.264, DVD, 400ips @ 960H, 6TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H16-8TB **NEW** HD	0656520	16 channel, H.264, DVD, 400ips @ 960H, 8TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm
QP960H16-12TB **NEW** HD	0656530	16 channel, H.264, DVD, 400ips @ 960H, 12TB, RS485 or coax telemetry, black, 90W (390mA), 100-240VAC, 440x420x90mm

QUANTUM^{PLUS} 16 CHANNEL WITH DVD

KEY FEATURES – QUANTUM^{PLUS} 960H

HD 960H VIDEO
This latest recording technology matches the DVR recording system to the cameras to produce an industry leading recording quality

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

ANALOGUE RECORDING

QUANTUM^{PLUS} 960H

QUANTUM^{PLUS} 960H MENU STRUCTURE

The Quantum^{Plus} 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.

QUANTUM^{PLUS} 960H REMOTE VIEWING SOFTWARE

If the Quantum^{Plus} 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^{Plus} 960H units. Remote access to the Quantum^{Plus} 960H set up menus is available if you have permitted access rights.

Q_REMOTE APP

CLIENT VIEWING SOFTWARE SUPPLIED FOC WITH THE QUANTUM^{PLUS} 960H

ANALOGUE RECORDING

Flexibility by Design™

QUANTUM^{XTRA} 960H

HD 960H

XTRA 960H

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

QUANTUM^{XTRA} 16 CHANNEL WITH DVD

KEY FEATURES – QUANTUM^{XTRA} 960H

HD 960H VIDEO
This latest recording technology matches the DVR recording system to the cameras to produce an industry leading recording quality

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

ANALOGUE RECORDING

QUANTUM^{XTRA} 960H

QUANTUM^{XTRA} 960H MENU STRUCTURE

The Quantum^{XTRA} 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.

QUANTUM^{XTRA}960H REMOTE VIEWING SOFTWARE

If the Quantum^{XTRA} 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 960H units. Remote access to the Quantum 960H set up menus is available if you have permitted access rights.

Q_REMOTE APP

CLIENT VIEWING SOFTWARE SUPPLIED FOC WITH THE QUANTUM^{XTRA} 960H

ANALOGUE RECORDING
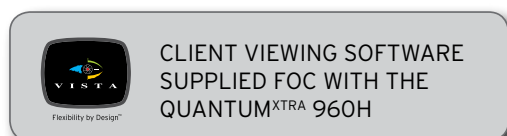
QUANTUM MANAGEMENT SOFTWARE – QCMS

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.

*Monitor displaying
QCMS software*

WEB

Key *ethernet*

Quantum

QCMS CLIENT VIEWING
SOFTWARE SUPPLIED FOC
WITH THE QUANTUM DVR

ANALOGUE RECORDING

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	No		1 - max resolution 1920x1080	
VGA Output	1			
Composite Output	1 x Main & 1 x Spot		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 16 way	8 on 8 way & 16 on 16 way
Audio Outputs	1			
Compression	H.264			
Record Resolution	D1 (720x576), 2CIF (720x288) or CIF (360x288)		960H (960x576), D1 (720x576), 2CIF (720x288) or CIF (360x288)	
Record Modes	Normal/Alarm/Motion/Duration/Schedule		Normal/Alarm/Motion/Audio Event/Duration/Schedule	
Record Speed	25ips@D1, 50ips@2CIF & 100ips@CIF		400ips@960H, 400ips@D1, 400ips@2CIF & 400ips@CIF	
Playback Speed	Real Time across all screen views (depends on recording speed)		Real Time in single and quad view (6fps in 8 or 16 way split)	Real Time across all screen views
Storage Capacity	320GB	Up to 2TB	Up 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, 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 & Pelco Protocol	
PTZ Control	PC/Mouse/IR Remote Control & Remote Keyboard	PC/Front Panel/Mouse/IR Remote 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 & QCMS			
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

ANALOGUE RECORDING

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

IR Remote	0497120	Spare IR remote for MiniD DVR

SD CARD (recommended type) not included with DVR

MiniD400	SanDisk class 2 SD/SDHC card 32Gb maximum

MINID400 PLAYER

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 versatile

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
(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.

SD CARD
(Not supplied)

IR receiver

Reset button

GROUND
ALARM OUT
GROUND
ALARM IN

12V DC

AV-IN cable

AV-OUT cable

Audio OUT (RCA)

Video IN (RCA)

Video OUT (RCA)

Audio IN (mono jack)
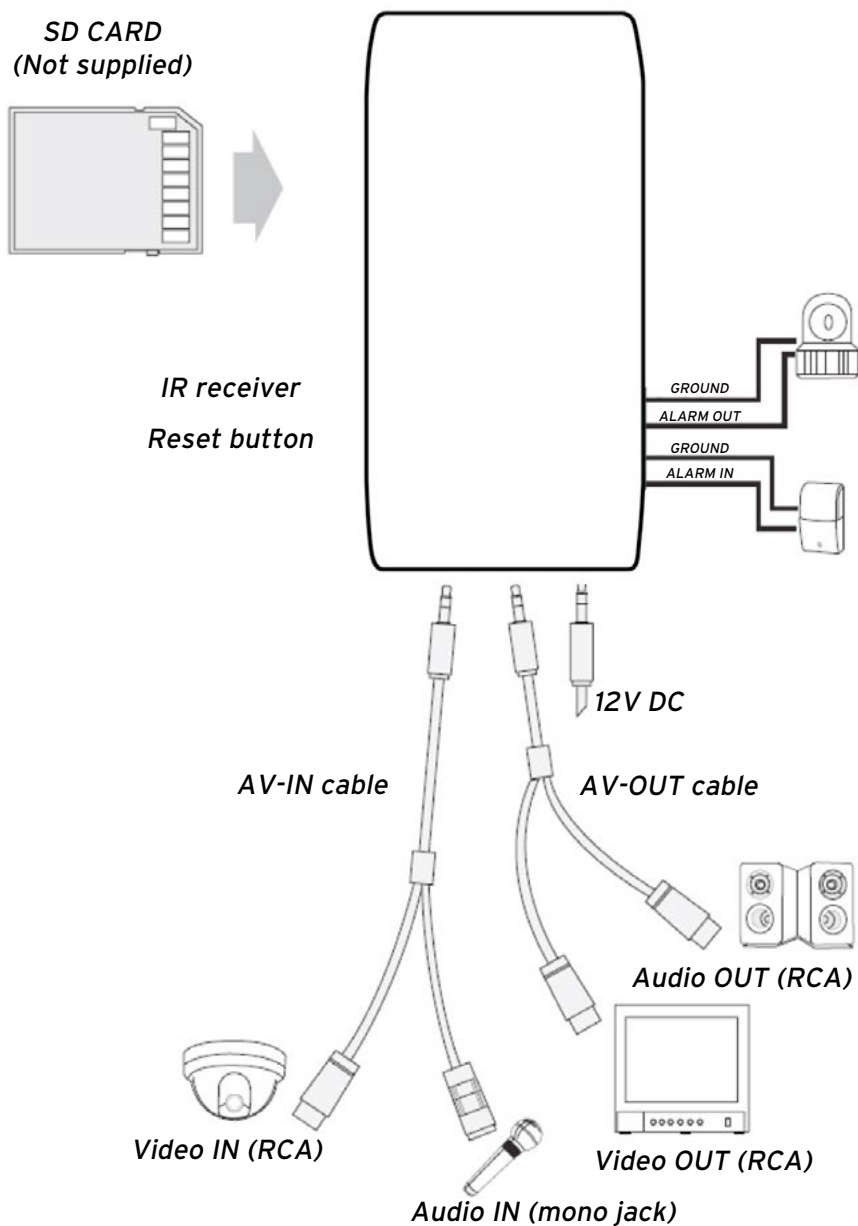
IP RECORDING

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

EASY TO USE
Intuitive screen layouts and clear menu structure

KEY FEATURES - VK2 REMOTE ANDROID APP

VK2_REMOTE

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

PTZ SUPPORT
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

VK2_REMOTE

SD CARD PLAYBACK
Remote playback of 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

PTZ SUPPORT
Complete control of PTZ cameras

AUDIO SUPPORT
Bi-directional audio

IP RECORDING

PC CONTROL

CLIENT VIEWING PC

VistaPC-i5-60-S **NEW**	0657160	Client PC, Windows 7 Pro, Intel i5 3.4GHz, 4GB RAM, 60GB solid state drive, dual monitor 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 **NEW**	0657170	Client PC, Windows 7 Pro, Intel i5 3.4GHz, 4GB RAM, 120GB solid state drive, dual monitor 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

VistaPC-KBDM	0657290	PC keyboard and mouse for use with VistaPC

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

SMALL FOOT PRINT
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

STYLISH
Brushed aluminium chassis ensures a professional look

IP RECORDING

NVR

VK2 NVR

VK2-REC04HDW1 **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-REC04HDW2 **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-REC04HDW3 **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 **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 **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 **NEW**	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 **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

EASY INSTALL
Automatic detection, viewing and recording of Vista VK2 IP cameras

REAL-TIME FULL HD VIDEO STREAMS
Record real-time full HD 1080p video streams

EMAIL ON EVENT
Emails containing system performance and alarm information

PTZ CONTROL
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

IP RECORDING

VK2 SYSTEM OVERVIEW

NVR

TABLET

CLIENT

PTZ DOME

EDGE RECORDING   IP CAMERA

NETWORK

NETWORK STORAGE

ENCODER

NVR   WEB BROWSER   SMART PHONE

ANALOGUE CAMERA

IP RECORDING
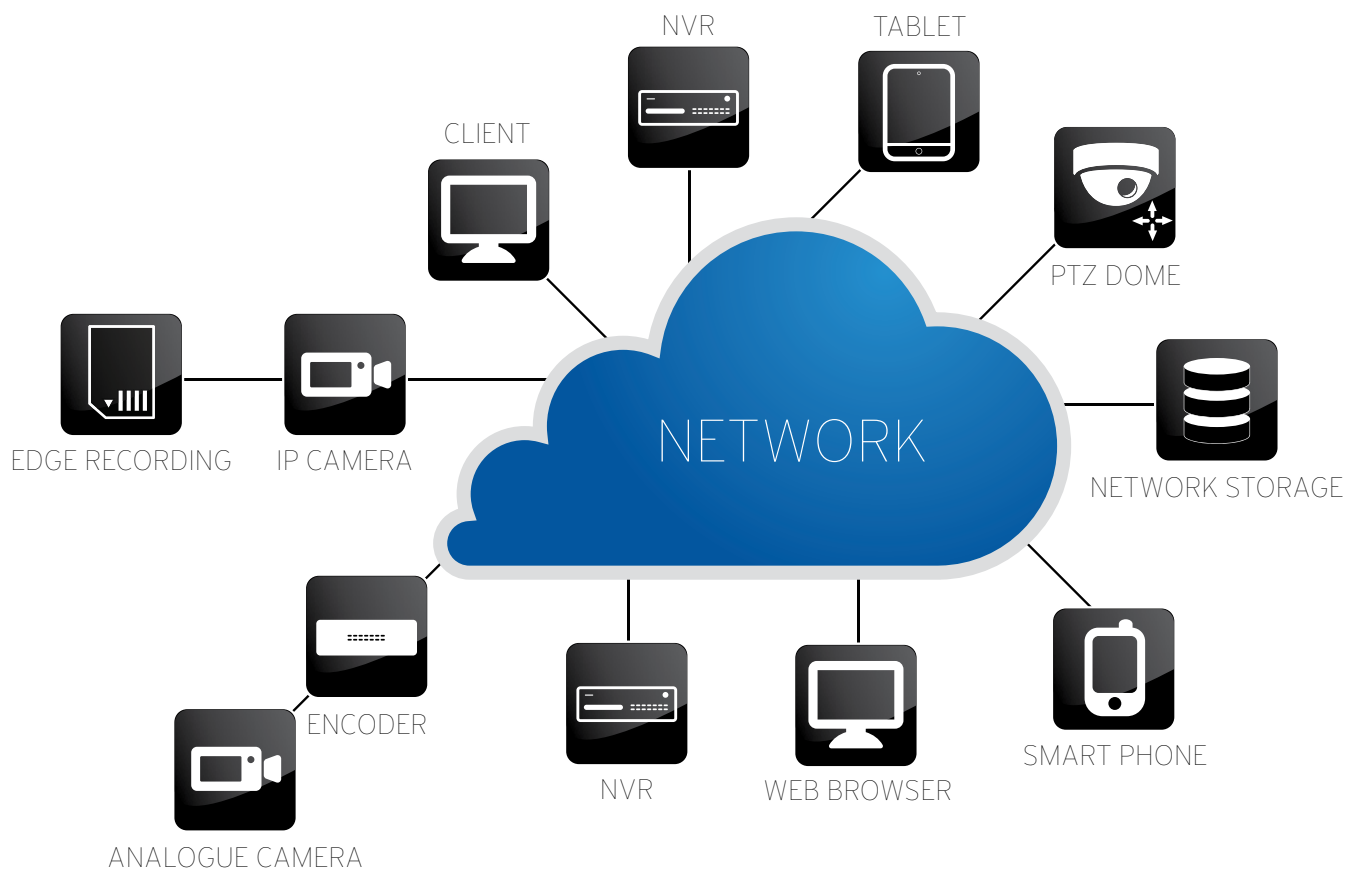
NVR

Graphica Sabre

GRAPHICA SABRE NVR

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

HIGH RESOLUTION RECORDING
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

IP RECORDING

SABRE OVERVIEW

IP VMS SOFTWARE

VISTA
Flexibility by Design™
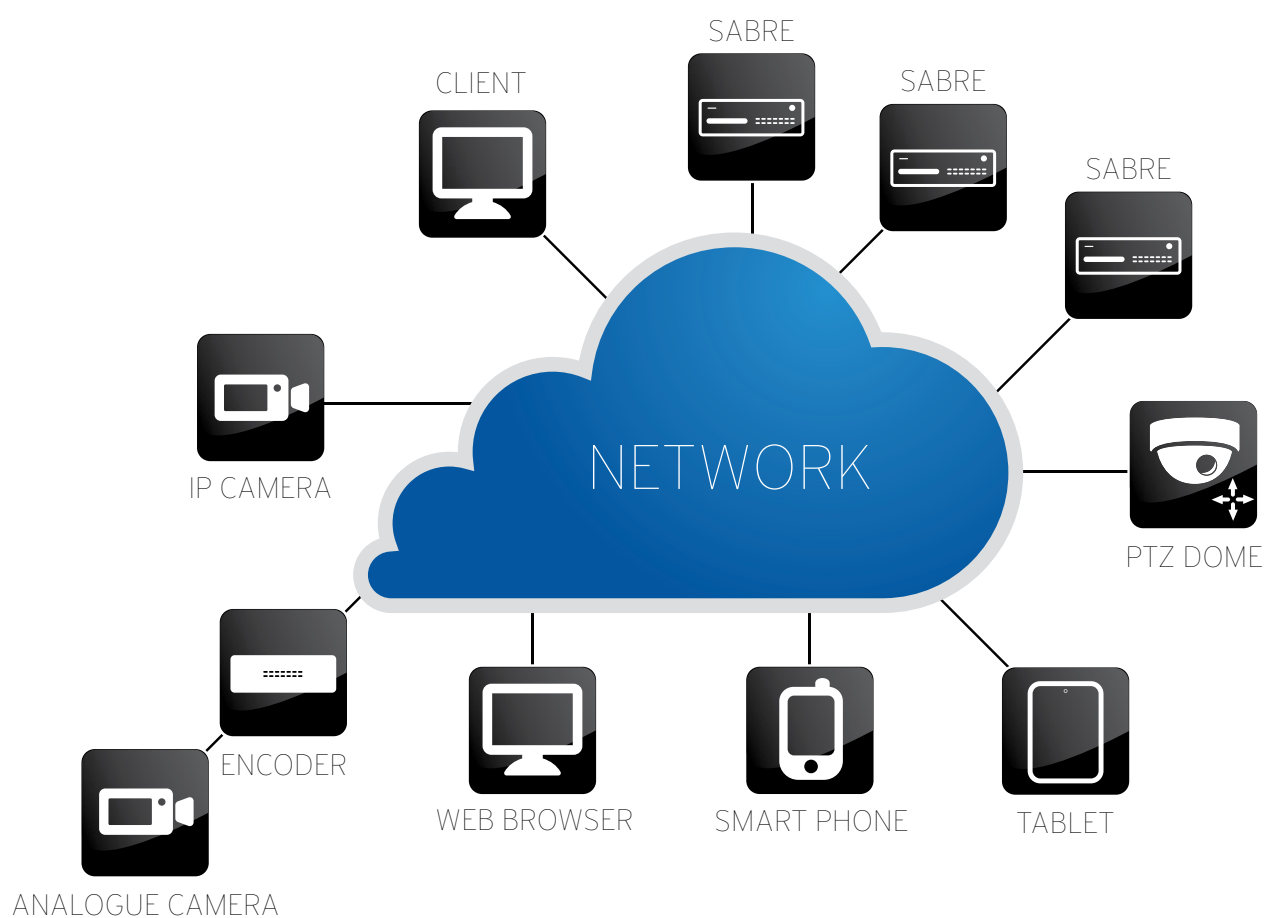
GRAPHICA2

Graphica2

CLIENT/SERVER LICENSES

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/NVR 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 LICENSE

GP2-VW	0473750	Graphica2 - 16ch video wall license

KEY FEATURES – GRAPHICA2

SCALABLE
Supports up to 1024 concurrently viewed live or playback video streams

CLIENT/SERVER ARCHITECTURE
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 0, 5 and 6 recording of IP cameras, recording and mirroring of DVR streams

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

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

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

VISTA ECLIPSE2 SUPPORT
View live and recorded 360 degree panoramic images

IP VMS SOFTWARE

GRAPHICA² OVERVIEW

SABRE

CLIENT

TABLET

IP CAMERA

NETWORK

WINDOWS NVR

ENCODER

PTZ DOME

ANALOGUE CAMERA

DVR

WEB BROWSER

SMART PHONE
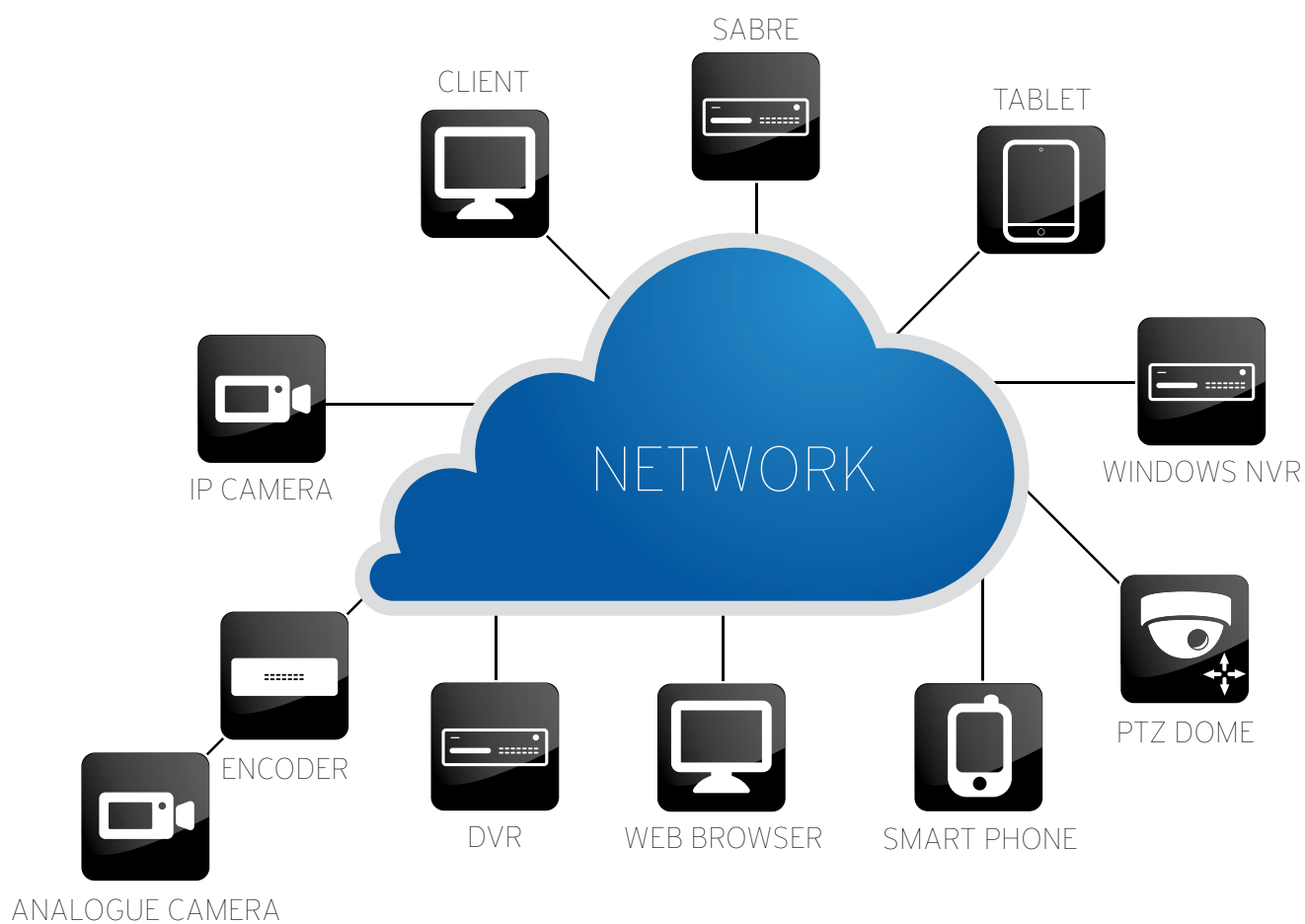
MONITORS

MONITORS

100 SERIES LED

VFS-117LED **NEW**	0498600	17" LED, 1280x1024 pixels, 1000:1, 5ms, 1 x looping BNC, S-VIDEO, DVI, VGA, 1 x looping audio, black, VESA 100, 20W (1.66A), 12VDC, PSU included, 371x376x197mm
VFS-119LED **NEW**	0498610	19" LED, 1280x1024 pixels, 1000:1, 5ms, 1 x looping BNC, S-VIDEO, DVI, VGA, 1 x looping 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, HDMI, 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 (2.5A), 12VDC, PSU included, 420x415x190mm

DISPLAY MONITOR WITH INTEGRAL CAMERA

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

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

GLASS FRONTED
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 SCREEN LED	17" LCD	19" LCD	19" LED
VIEWING ANGLE	85/85/80/80		80/80/80/80	85/85/80/80		80/80/80/80	85/85/80/80	85/85/80/80
CONTRAST RATIO	1000:1							
BRIGHTNESS	250cd/m2							
RESOLUTION	1280x1024				1920x1080	1280x1024		
HORIZONTAL RESOLUTION	550TVL		700TVL					
RESPONSE TIME (ms)	<5ms							
HDMI INPUT	N/A		•					
PC INPUTS	DVI & VGA		VGA					
COMPOSITE VIDEO INPUTS	1 x Looping BNC & 1 x S-Video		2 x Looping BNC & 1 x S-Video					2 x Looping BNC
AUDIO INPUTS	1							
AUDIO OUTPUTS	1							
SPEAKERS	2 x 1W							
FRONT PANEL KEYLOCK	•							
RUNNING HOURS	•							
PICTURE FREEZE	No		•					No
PICTURE-IN-PICTURE	No					•		
SCREEN SPLITTER	No					•		No
GLASS FRONT	•							No
CASE	Plastic							Metal
HOUSING COLOUR	Black							
VOLTAGE	100 - 240VAC to 12VDC Adaptor supplied							240VAC or 24VDC Adaptor 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

MONITORS

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.

VESAWM
0498620

VESAWMPT
0498630

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

MONITORS

BRACKETS

VESAWM	0498620	Vesa flush fit wall bracket, black, 75/100mm, up to 15kg
VESAWMPT	0498630	Vesa tilt & turn wall bracket, black, 75/100mm, up to 15kg
VESAWMPTE	0498640	Vesa tilt & turn extended wall bracket, black, 75/100mm, up to 15kg
VESA200	0444040	Vesa flush fit wall bracket, black, 75/100/200X100mm
VFSM/VESA/WC	0096570	Vesa wall/ceiling bracket, 75/100mm, 1 metre drop, black
VFSM/VESA/CC	0098100	Vesa ceiling bracket, 75/100mm, 1 metre drop, cream
VFSM/VESA/CB	0093650	Vesa ceiling bracket, 75/100mm, 1 metre drop, black
LCD-IPMCA	0251750	Internal monitor pole mount ceiling adapter, black
LCD-IPMGA	0249130	Internal monitor pole mount girder adapter, black
VCBDEL2M	0092210	2m pole, supplied with coupler, chrome
VESAPA1	0264980	Single LCD pole adapter, black
VESAPA2	0264990	Double LCD pole adapter, black

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 BRACKET RANGE PLEASE REFER TO PAGE 110 & 111

VESAPA1
(0264980)

VESAPA2
(0264990)

TRANSMISSION

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
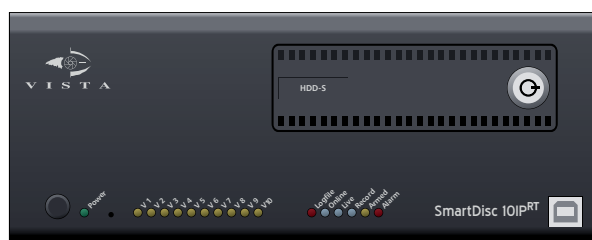
SMARTMOBILE

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.

S_REMOTE

Flexibility by Design™

SMARTTEL RANGE

SMARTTEL - TRANSMISSION ONLY

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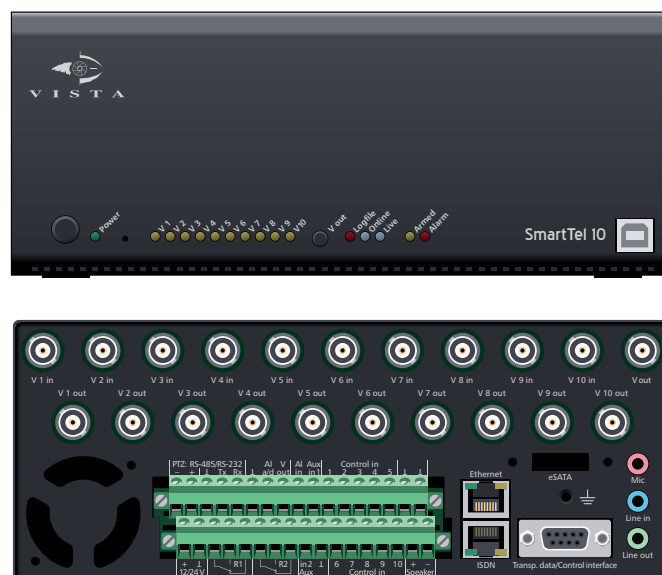
SMARTTEL 10 CHANNEL

KEY FEATURES – SMARTTEL 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.

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)
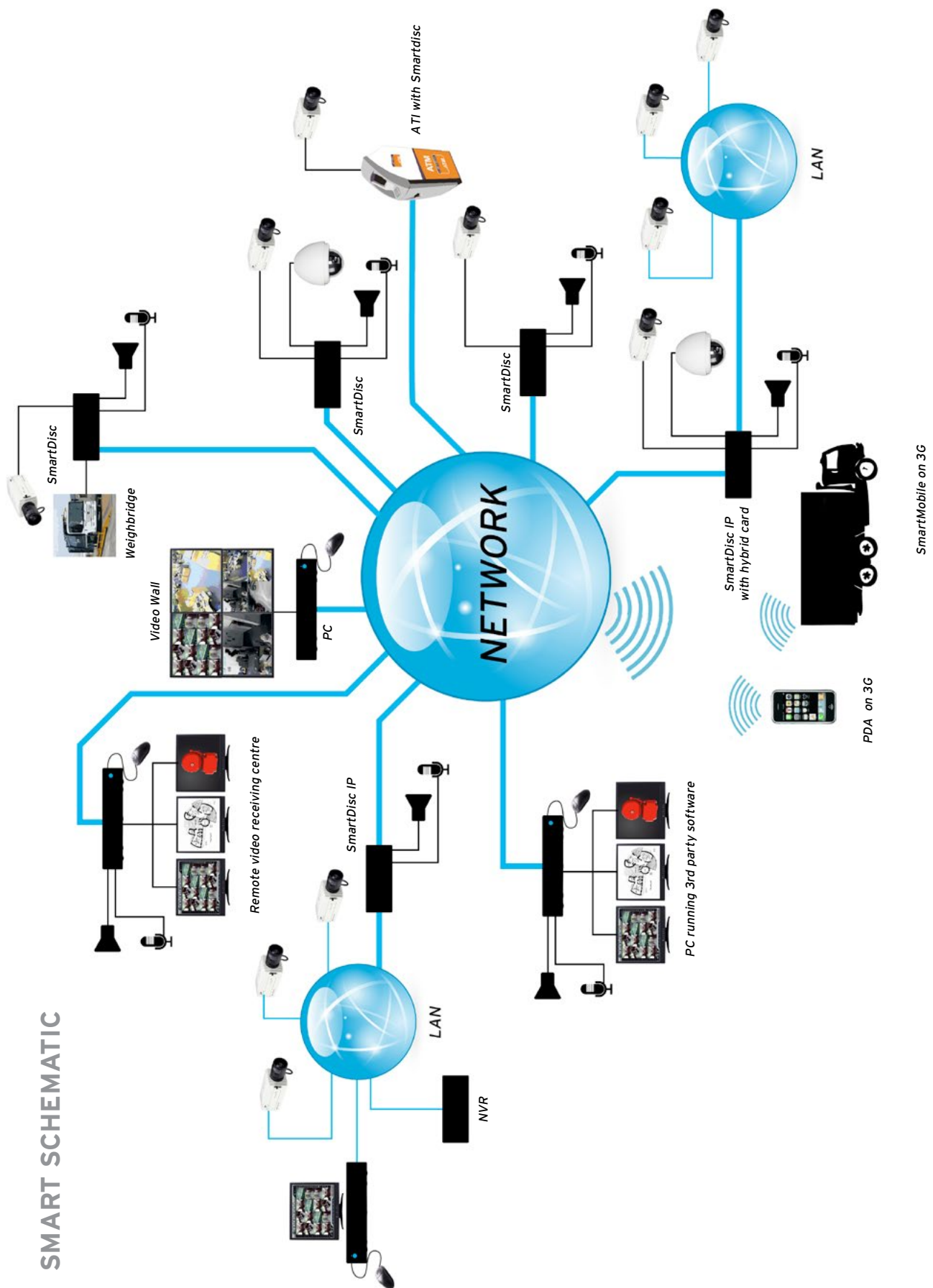
FULLY COMPATIBLE WITH ALL SMART CONTROL AND EMS SOFTWARE PACKAGES
Vista's seamless approach to systems integration allows multiple IP or analogue units to be installed without the need for separate software, reducing required operator training and time, and retaining the same, familiar software front 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

TRANSMISSION

Flexibility by Design™

SMARTDISC RANGE

SMARTDISC - TRANSMISSION & RECORD

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

KEY FEATURES – SMARTDISC 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.

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

ADAPTIVE HARD DRIVE MANAGEMENT
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

HTCOMPRESS
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 - 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
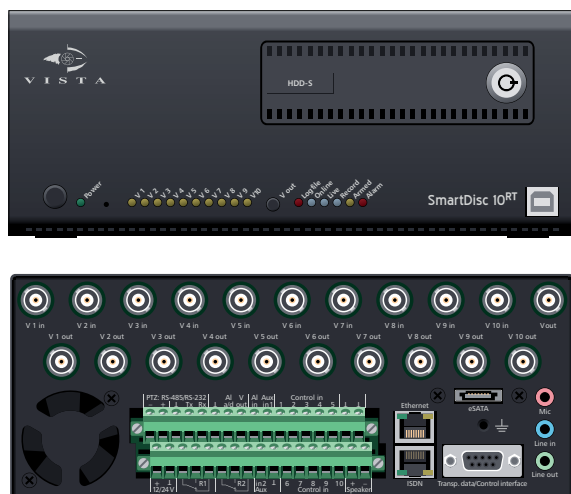
SMARTDISC 10 CHANNEL REAL-TIME

FOR MORE INFORMATION VISIT: **VISTA-CCTV.COM/IP -** VISTA AT A GLANCE **V5** **85**

TRANSMISSION

SMARTDISC IP

SMARTDISC IP - TRANSMISSION & RECORD

| VLS2-10IPRT | 0480270 | 10 channel, Real Time, IP/Hybrid, built-in LAN, telemetry, audio, BS8418 alarms & 16000 |
| **NEW** | | event log, requires HDD, black, 49.2W (4.1A) @ 12VDC, PSU included, 221x270x88mm |
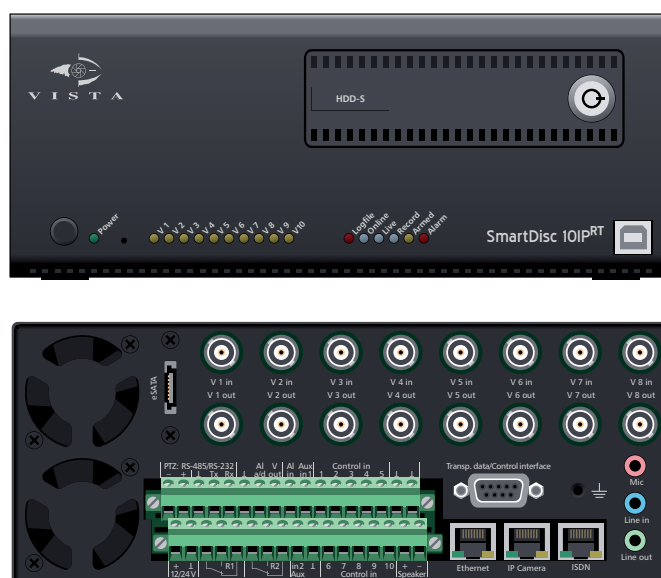
SMARTDISC IP 10 CHANNEL REAL-TIME

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.

10 IP CHANNELS
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

HTCOMPRESS
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 IP connections via Pc, Smartphone, plus PDA browser (additional to 5 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 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

TRANSMISSION

SMART SCHEMATIC

NETWORK

ATI with Smartdisc

SmartDisc

SmartDisc

SmartDisc

Weighbridge

Video Wall

PC

LAN

LAN

NVR

SmartDisc IP

Remote video receiving centre

SmartDisc IP with hybrid card

SmartMobile on 3G

PDA on 3G

PC running 3rd party software

TRANSMISSION

Flexibility by Design™

SMARTMOBILE RANGE

SMARTMOBILE - TRANSMISSION & RECORD

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

KEY FEATURES – SMARTMOBILE 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.

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
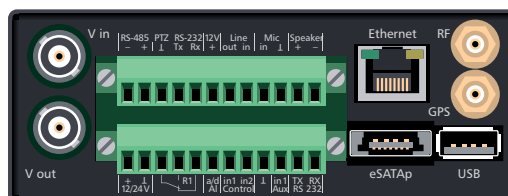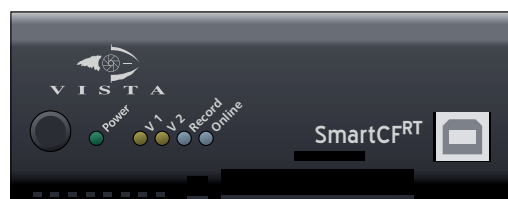
SMARTMOBILE 2 CHANNEL REAL-TIME REQUIRES COMPACT FLASH CARD
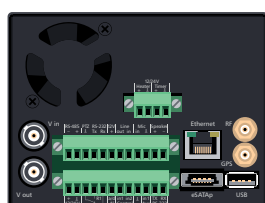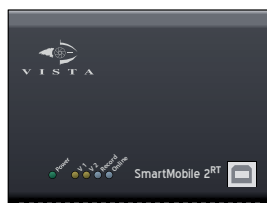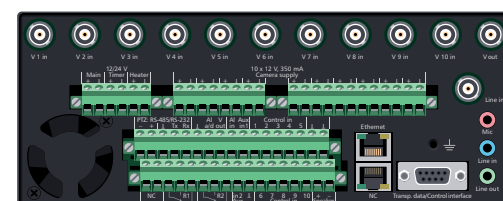
SMARTMOBILE 2 CHANNEL REAL-TIME INCLUDES 1TB STORAGE

SMARTMOBILE 10 CHANNEL REAL-TIME

TRANSMISSION

SMARTMOBILE RANGE

SMARTCONTROL SOFTWARE WITH GPS TRACKING

Key   *coax*   *ethernet*

Mobile VLS-CAM

Equipment in vehicle Cameras, SmartMobile, 3G Router with GPS & Aerial

Vehicle can be fitted with a panic alarm for instant connection to Remote Monitoring Station

iPhone

WEB

iPad

ADSL Router

PC monitor A - To view single or multiple cameras on the vehicle

PC monitor B - To track the vehicles location/route using Google maps and to display vehicle information

SMART RANGE ACCESSORIES

HDD FOR SMART RANGE

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 0lux

INTEGRAL 3.6MM LENS
High-quality wide-angle lens provides 63º 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

VLS-CAM600IR
(0474270)

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

	SMARTTEL O4	SMARTTEL 10	SMARTTEL O2 (RT + 1TB)	SMARTDISC O4	SMARTDISC O4 (RT)	SMARTDISC 10	SMARTDISC 10 (RT)	SMARTDISCIP 10 (RT)	SMARTCF O2 (RT)	SMARTMOBILE O2 (RT + 1TB)	SMARTMOBILE O4	SMARTMOBILE 10 (RT)
VIDEO INPUTS	4	10	2	4	4	10	10	Optional up to 8	1	1	4	10
VIDEO OUTPUTS (LOCAL)	1	1	No	1	1	1	1	No	No	No	1	1
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/H.compress	JPEG/H.compress	JPEG/H.compress	JPEG/H.compress	JPEG/H.compress	JPEG/H.compress	JPEG/H.compress	JPEG/H.compress	JPEG/H.compress	JPEG/H.compress	JPEG/H.compress	JPEG/H.compress
IP COMPRESSION	JPEG/MJPEG	JPEG/MJPEG	JPEG/MJPEG	JPEG/MJPEG	JPEG/MJPEG	JPEG/MJPEG	JPEG/MJPEG	JPEG/MJPEG/H.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	n/a	Continuous & Event	Continuous & Event	Continuous & Event	Continuous & Event	Continuous & Event	Continuous & Event	Continuous & Event	Continuous & Event	Continuous & Event	Continuous & Event
HDD STORAGE	n/a	n/a	1TB	up to 4TB	up to 4TB	up to 4TB	up to 4TB	up to 4TB	''up to 64GB (to Compact)	1TB	1TB	1TB
REMOVABLE HDD	n/a	n/a	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
PRE-ALARM RECORDING (RAM)	Approx 1000 images	Approx 1000 images	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AUDIO INPUTS	1 x Line in & 1 x Mic in	1 x Line in & 1 x Mic in	1 x Line in	1 x Line in & 1 x Mic in	1 x Line in & 1 x Mic in	1 x Line in & 1 x Mic in	1 x Line in & 1 x Mic in	1 x Line in & 1 x Mic in	1 x Line in	1 x Line in	1 x Line in & 1 x Mic in	1 x Line in & 1 x Mic in
AUDIO OUTPUTS	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	1 x Line out	1 x Line out
PTZ CONTROL	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
SERIAL INPUT	1	1	1	1	1	1	1	1	1	1	1	1
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 + 1 x tamper & 1 x arm/disarm	10 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm	2 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm	4 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm	4 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm	10 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm	10 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm	10 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm	2 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm	2 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm	4 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x arm/disarm	10 (additional 50 with optional ALM50R) EoL + 1 x tamper & 1 x 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 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 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 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 CONNECTIONS	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)	6 (plus 4 via WebServer)

Flexibility by Design™

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

SMART VIDEOWALL SOFTWARE

VLS-VW	0495930	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

CONNECTION TO 64 TRANSMITTERS
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

PTZ CONTROL
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-ALARMS
As well as live images, the operator can recall archived images from any of the connected SmartDisc devices as well as the pre-alarm images from SmartTel devices

TRANSMISSION

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)

Video server & database engine software

Up to 50 operator stations consisting of SmartControl Client and Event Client, including an alarm management tool with dynamic database for alarm processing

3G/GSM   PSTN

ADSL   WEB   ISDN

SmartMobile   SmartDisc   SmartTel   SmartDisc IP

TRANSMISSION
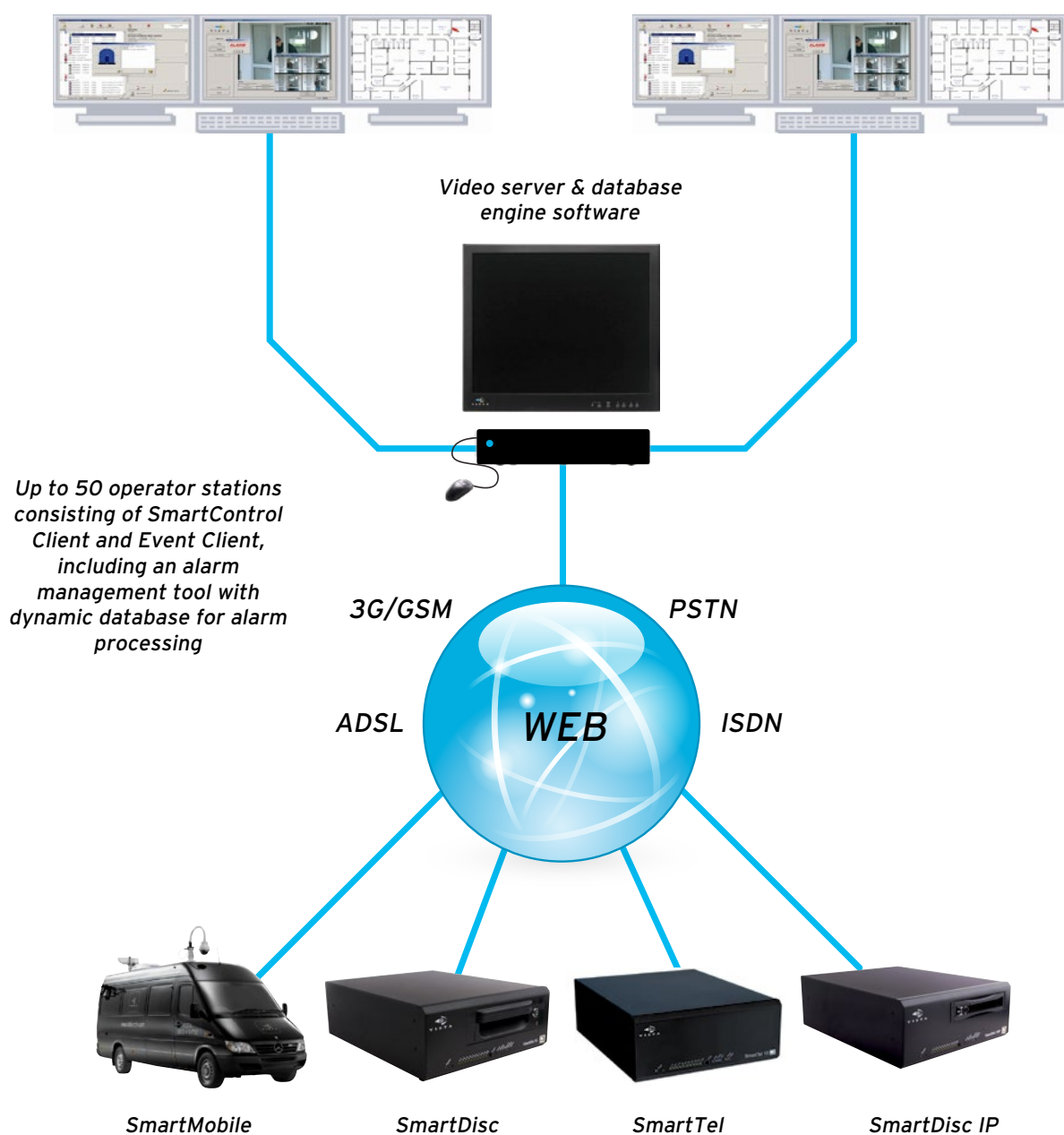
MANAGEMENT RECEIVING SOFTWARE - EMS

KEY FEATURES – MANAGEMENT RECEIVING SOFTWARE

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

S_REMOTE

SMARTPHONE AND PDA USING SMARTVIEW SOFTWARE

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)

VNPR

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

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

RELIABILITY
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

CAMERAS & ACCESSORIES

BRACKETS

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 CAMERAS

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
VNPRBOLLARD15	0472060	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

RELIABILITY
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

VNPR CAMERA COMPARISON CHART

	MOUNT	MAX OF 30° & HEIGHT	RANGE	IMAGES PER/SEC (IPS) REQUIRED AT X MPH						
				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 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

VNPR LITE CONTROLLER FEATURES

Application	Module	Lite	Protos	Protos Server
LIVE	JetBase Live	Yes	Yes	Yes
	Remote Alarms	No	Requires dongle + Vistawatch*	Requires dongle + 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
	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	-	-	-
REVIEW	JetBase Review	Yes	Yes	Yes
	Auto Search	Yes	Yes	Yes
	Overstay	No	Yes	Yes
	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 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
MISC APPS	JetWatch	Yes	Yes	Yes
	JetCam	-	-	-
	JetOnline	Optional*	Optional*	Optional*
STREAM	Stream IN (server/mirror)	No	No	Yes
	Stream OUT (server/client)	Yes	Yes	N/A
	Remote Log Viewer	No	No	No
	Relay Server	No	No	No
ANPR ENGINE	Input System Details	Yes	Yes	Yes
	Relays (Barriers)	Yes	Yes	Yes
	Scarab / Beetle	N/A	N/A	N/A
	XML Export	No	No	No
	GPS Unit	No	No	No
	Network Interface (other than SimpleXML, which isn't dongled)	No	Yes	Yes
	Allow disabled lanes	N/A	N/A	N/A
DETECT ENGINE	Speed	No	No	No
	VMD	No	Yes	N/A
	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
IP CAMERAS	JetHD01	No	Yes	
	JetHDOV01	No	No	
	Hippo	No	No	
	Fox-iHD	N/A	N/A	
	IndigoVision	No	No	

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.

Notes 1: * Denotes extra cost option

VNPR

VISTA
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VNPR PC & SOFTWARE

VNPR LITE CONTROLLERS

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

VNPR LITE SERVER CONTROLLER

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

DISPLAYS LIST
OF RECENT READ
PLATES

DISPLAYS LIVE
PICTURES FROM
CAMERAS

DISPLAYS DATABASE
INFORMATION FROM
KNOWN PLATES

ALLOWS EDITING
& ADDING OF
DATABASE ENTRIES

DISPLAYS LIST
OF PLATES FROM
SEARCH RESULT

DISPLAYS
CAPTURED IMAGES
FROM NUMBER
PLATE CAMERAS
& OVERVIEW
CAMERAS

ALLOWS VARIOUS
SEARCH CRITERIA
TO BE ENTERED TO
NARROW SEARCH
FOR A PARTICULAR
PLATE

DISPLAYS STORED
DATABASE
INFORMATION
RELATIVE TO
SELECTED NUMBER
PLATE

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

VNPR

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
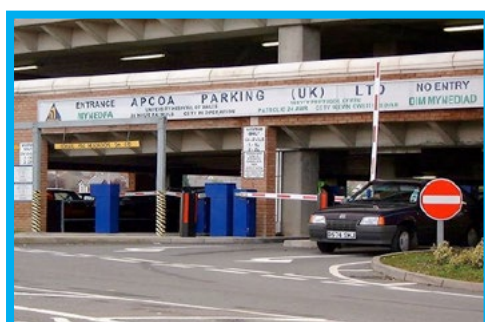
AIRPORT SECURITY

MAINTENANCE (after 1st year warranty when NEW)

VNPR1SSU	0310410	1 Lane annual software maintenance
VNPR2SSU	0310420	2 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.

OR

VNPR Bollard Camera

VNPR Wall/Pole Camera

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.

Input to PC from VNPR camera

Input to PC from Overview camera

Output to LCD Display

VNPR Lite Server

Remote Viewing of VNPR system via WebBrowser connection - Optional
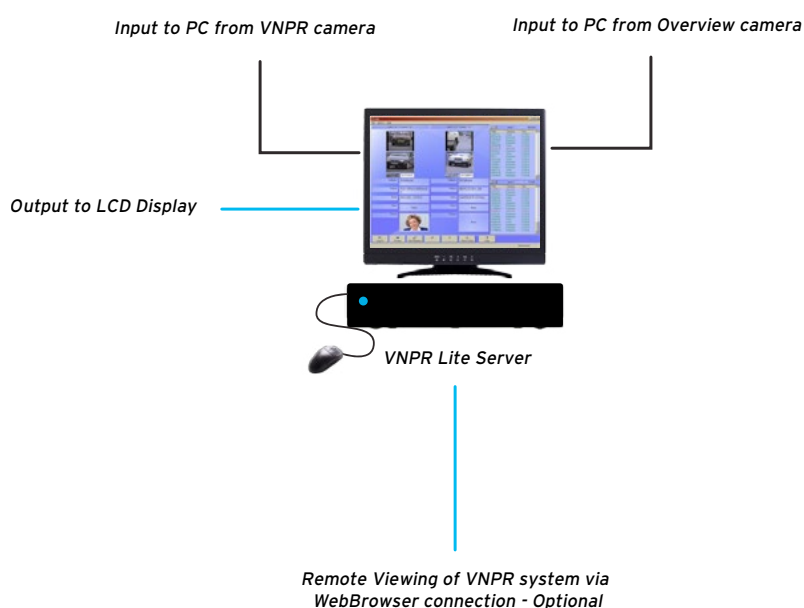
VNPR

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.

VNPR controller

Up to 4 VNPR & overview cameras

VNPR controller

Up to 4 VNPR & overview cameras

VNPR controller

Up to 4 VNPR & overview cameras

VNPR Lite Server

Up to 4 VNPR & overview cameras

Up to 4 VNPR & overview cameras

VNPR controller

VNPR controller
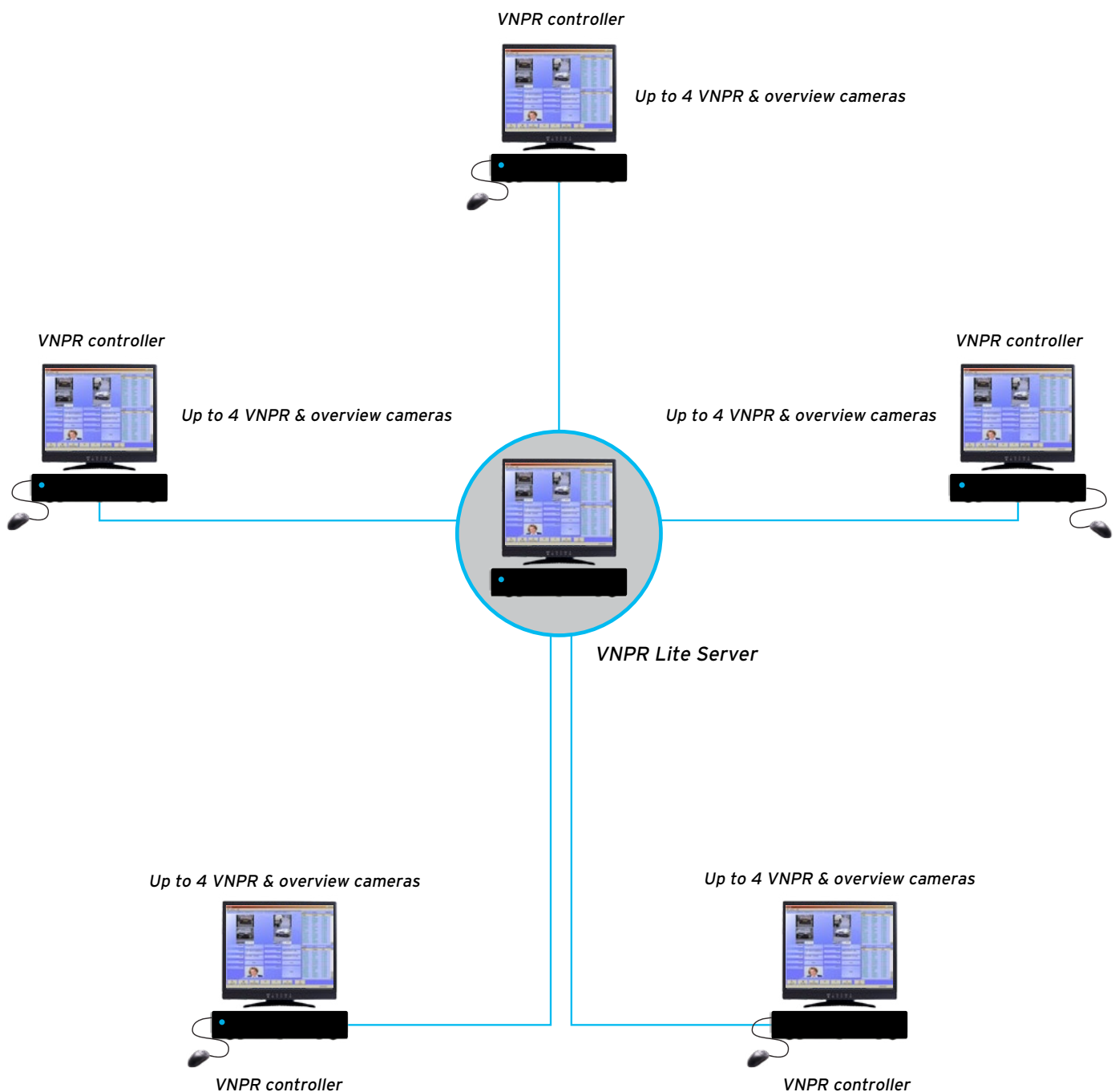
POWER SUPPLIES

INTERNAL 12VDC

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

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

POWER SUPPLIES

	INPUT VOLTAGE	OUTPUT VOLTAGE	No of OUTPUTS	CONSTRUCTION	WEIGHT	DIMENSIONS (mm)	CABLE ENTRY	INPUT CABLE/CONNECTIONS	OUTPUT CABLE / CONNECTIONS	IP RATING
INTERNAL 12VDC										
VPSU500/12	110-240VAC	12VDC	1 x 500mA	Plastic	150g	94x26.5x46		1.9m Cable	1.8m Cable & 2.1mm jack	
VPSU500/12P	110-240VAC	12VDC	1 x 500mA	Plastic	150g	94x26.5x46		1.9m Cable	1.8m Cable & 2.1mm jack	
VPSU1000/12	110-240VAC	12VDC	1x1A	Plastic	150g	94x26.5x46		1.9m Cable	1.8m Cable & 2.1mm jack	
VPSU2000/12N	110-240VAC	12VDC	1 x 2A	Plastic	275g	108x32x58		1.9m Cable	1.8m Cable	
EXTERNAL 2VDC										
VPSU122EXT	230VAC	12VDC	1 x 2A	Plastic	1.44kg	158x89x78	2 x gland	Fused terminal	1 x Fused terminal	66
VPSU241	230VAC	12VDC	1 x 4A	Plastic	1.45kg	187.2x122x90	2 x gland	Fused terminal	1 x Fused terminal	66
VPSU244	230VAC	12VDC	4 x 1A	Plastic	1.45kg	187.2x122x90	2 x gland	Fused terminal	4 x Fused terminal	66
VPSU1248	230VAC	12VDC	8 x 500mA	Plastic	1.45kg	187.2x122x90	2 x gland	Fused terminal	8 x Fused terminal	66
INTERNAL 24VAC										
VPSU24VAC/750	230VAC	24VAC	1 x 750mA	Plastic	529g	80x55x48		1.9m Cable	180mm Cable	
VPD-PSU1e	230VAC	24VAC	1 x 1.5A	Plastic	920g	85x66x54.7		1.7m Cable	1 x Terminal	
VPSU24VAC/2000	230VAC	24VAC	1 x 2A	Plastic	529g	80x55x48		1.9m Cable	180mm Cable	
VPSU24VAC/3000	230VAC	24VAC	1 x 3A	Plastic	1.3kg	100x65x72		1.9m Cable	180mm Cable	
EXTERNAL 24VAC										
VPSU243EXT	230VAC	24VAC	1 x 3A	Plastic	1.44kg	158x89x78	2 x gland	Fused terminal	1 x Fused terminal	66
VPSU2441	230VAC	24VAC	1 x 4A	Plastic	2kg	207x122x90	2 x gland	Fused terminal	1 x Fused terminal	66
VPSU245EXT	230VAC	24VAC	1 x 5A	Plastic	1.71kg	207x122x90	2 x gland	Fused terminal	1 x Fused terminal	66
VPSU247EXT	230VAC	24VAC	1 x 7A	Plastic	1.71kg	207x122x90	2 x gland	Fused terminal	1 x Fused terminal	66
VPSU2444	230VAC	24VAC	4 x 1A	Plastic	2.1kg	207x122x90	2 x gland	Fused terminal	4 x Fused terminal	66
VPSU2488	230VAC	24VAC	8 x 1A	Plastic	3kg	240x191x107	2 x gland	Fused terminal	8 x Fused terminal	66

MISCELLANEOUS

CABLE & CONNECTORS

CABLE

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 **NEW**	0480010	100m of RG59, copper coated steel core coax cable, suitable for video and telemetry up to 150m, UV, LSF, black
RG59/CCS/100W **NEW**	0480130	100m of RG59, copper coated steel core coax cable, suitable for video and telemetry up to 150m, white
RG59/CCS/200 **NEW**	0480020	200m of RG59, copper coated steel core coax cable, suitable for video and telemetry up to 150m, UV, LSF, black
RG59/CCS/500 **NEW**	0480030	500m of RG59, copper coated steel core coax cable, suitable for video and telemetry up to 150m, UV, LSF, black
RG59/SCC/100 **NEW**	0480060	100m of RG59, solid copper core coax cable, suitable for video and telemetry up to 250m, UV, LSF, black
RG59/SCC/200 **NEW**	0480070	200m of RG59, solid copper core coax cable, suitable for video and telemetry up to 250m, UV, LSF, black
RG59/SCC/500 **NEW**	0480080	500m of RG59, solid copper core coax cable, suitable for video and telemetry up to 250m, UV, LSF, black
RG59/SG5/100 **NEW**	0480090	100m of shotgun cable, RG59 copper coated steel core coax, 2 x 0.5mm power cores, suitable for video and telemetry up to 150m, UV, LSF, black
RG59/SG5/200 **NEW**	0480100	200m of shotgun cable, RG59 copper coated steel core coax, 2 x 0.5mm power cores, suitable for video and telemetry up to 150m, UV, LSF, black
RG59/SG75/100 **NEW**	0480110	100m of shotgun cable, RG59 copper coated steel core coax, 2 x 0.75mm power cores, suitable for video and telemetry up to 150m, UV, LSF, black
RG59/SG75/200 **NEW**	0480120	200m of shotgun cable, RG59 copper coated steel core coax, 2 x 0.75mm power cores, 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

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

COAX TELEMETRY
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

UV RESISTANT
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

MISCELLANEOUS

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
VVDA-SRM	0379980	Double rack mount kit for VVDA units

TEST EQUIPMENT & TOOLS

HUMV	0472580	Passive ground loop isolation transformer
VTM04C	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)

VTMPRO
(0472590)

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 cable runs

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

LONG BATTERY LIFE
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

VLBK/B	0445870	Key & barrel for VLBMUX
QBOXKB	0497630	Replacement key and barrel for QBOX

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

SECURING HOLES IN BASE
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

VISTA
Flexibility by Design™

	VFD Internal use only	VFDA VK2-VFD Internal use only	VVRD, VK2-VRD, VPL7-WP-SM VK2-600PTZ Internal or external use only
SOLID CEILING MOUNT	Dome is surface mount as standard	Dome is surface mount as standard	SPACER (0497160) Spacer can be used to hide connections
FALSE CEILING MOUNT	-	-	VPL-SM-FM (0497090) False Ceiling kit for use with the VPL7-WP-SM only
WALL MOUNT	VFDS-IWMB/W (0444930) or VFDS-IWMB/B (0444940)	-	VVRD-EWMB1 VRD-EWMB VPL-EWMB/PSU (0479030) (0498930) (0442910) or or Not for use with VK2-600PTZ (0442910)
CORNER MOUNT	-	-	VRD-EWMB + VDM-ECMA (0498930) (0457230)
PENDANT FIXED LENGTH	VFDS-IPMB/W (0155090) 1500mm length	-	VRD-EPMB (0498940) 500mm length
PENDANT ADJUSTABLE LENGTH	VDM-IPMCA (0276270) Ceiling Adaptor VFDS-IPMA (0300860) Adaptor	or VDM-2MP (0276240) 2m Pole Depending on the length required another VDM-2MP can be used, also a VDM-C 0276250 coupler is required VFDA only VFDA-IPMA (0499140) Adaptor	VDM-IPMGA (0291100) Girder Adaptor VK2-VFD domes only VFDAS-IPMA (0496980) Adaptor VPL-IPMA (0291180) Adaptor
SIDE POLE MOUNT	-	-	VRD-EWMB + VDM-EPMAg (0498930) (0457240)
SWAN NECK	-	-	VRD-TM (049895)

All brackets are RAL7035 (cool grey) unless otherwise stated

BRACKET CONFIGURATORS

	VPL600eco Internal use only	Eclipse2, Eclipse2X Internal & external use	VPL7-WP-PM Internal & external use	Powerdome Internal & external use	VK2-1080PTZ VK2-1080PTZHSG required for all external and bracket mount options
SOLID CEILING MOUNT	SPACER (0497160) Spacer can be used to hide connections	-	Use VPL7-WP-SM	Use VPP Surface Mount Range	Dome is surface mount as standard
FALSE CEILING MOUNT	The dome can be either surface or flush mount as standard	Eclipse2-FM (0498090)	Use VPL7-WP-SM	Use VPP False Ceiling Mount Range	VK2-1080PTZICM (0498730)
WALL MOUNT	VVRD-EWMB1 (0479030) or VRD-EWMB (0498930)		VPL-EWMBe (0498960)	VPP-EWMB (0452100) or VPL-EWMBe (0498960)	
CORNER MOUNT	-	VRD-EWMB (0498930) + VDM-ECMA (0457230)	VPL-EWMBe (0498960) + VDM-ECMA (0457230)	VPP-EWMB (0452100) or VPL-EWMBe (0498960) + VDM-ECMA (0457230)	
PENDANT FIXED LENGTH	VRD-EPMB (0498940) 500mm length		250mm VPP-IPMB250 (0473170) or 500mm VPP-IPMB500 (0472180) or 1000mm VPP-IPMB1000 (0472190) or 2000mm VPP-IPMB2000 (0472200)		
PENDANT ADJUSTABLE LENGTH	VDM-IPMCA (0276270) Ceiling Adaptor or VDM-IPMGA (0291100) Girder Adaptor VDM-2MP (0276240) 2m Pole Depending on the length required another VDM-2MP can be used, also a VDM-C 0276250 coupler is required VPL-IPMA (0291180) Adaptor · · · VPP-IPMA (0472160) Adaptor				
SIDE POLE MOUNT	-	VRD-EWM (0498930) + VDM-EPMAg (0457240)	VPL-EWMBe (0498960) + VDM-EPMAg (0457240)	VPP-EWMB (0452100) or VPL-EWMBe (0498960) + VDM-EPMAg (0457240)	
SWAN NECK	-	VRD-TM (0498950)		VPP-TM (0470440)	

All brackets are RAL7035 (cool grey) unless otherwise stated

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

All brackets are Black unless otherwise stated

COMPATIBILITY

TELEMETRY PROTOCOL GUIDE

	Control Equipment						Camera or Dome								
	Quantum EVO non DVD	Quantum EVO DVD	Quantum Plus 960H	Quantum Xtra 960H	VKBD1 Keyboard	VKBD4 Keyboard	VPC5-700DNS	VPC5-704DNS	VZM22INT600	VZM22EXT600	VVRD28VI2DN-650	VVRD22ZM600	VPL600eco	Powerdome Lite VPL7	Powerdome Pro
FSK (up the coax) Protocols															
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 required.

*** 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.

WINDOWS SOFTWARE & MOBILE DEVICES

		WINDOWS XP	WINDOWS 7	WINDOWS 8
Client Software	QuantumEvo Client	✔	✔	✔
	QuantumPlus Client	✔	✔	✔
	QuantumXtra Client	✔	✔	✔
	Quantum QCMS	✔	✔	✔
	SmartControl Lite	✔	✔	✔
	SmartControl Pro	✔	✔	✔
	Smart Videowall	✔	✔	✔
	Smart EMS	✔	✔	✔
	VK2 Client		✔	✔
	Graphica 2		✔	✔
Internet Browser (IE9/10)	QuantumEvo H.264	✔	✔	✔
	QuantumPlus 960H	✔	✔	✔
	QuantumXtra 960H	✔	✔	✔
	SmartTel/Disc/Mobile	✔	✔	✔
	VK2 Cameras		✔	✔
	Eclipse2	✔	✔	✔
	Graphica Sabre		✔	✔
	Graphica 2 Server		✔	✔

FOR ASSISTANCE WITH SOFTWARE COMPATIBILITY AND MOBILE DEVICES PLEASE CONTACT OUR TECHNICAL SUPPORT TEAM.
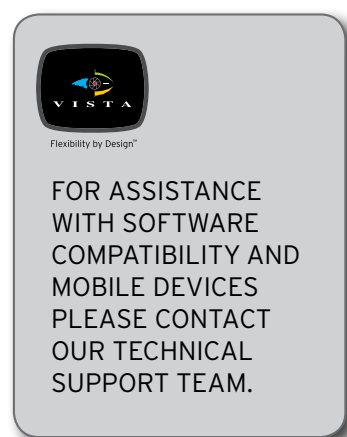
		iPod touch	iPhone	iPad	Android
Q_REMOTE	Quantum	✔	✔	✔	✔
S_REMOTE	Smart	✔	✔	✔	
VK2_REMOTE	VK2 Range	✔	✔	✔	✔
G_REMOTE	Graphica 2 & Sabre	✔	✔	✔	

CCTV SITE SURVEY FORM

Location: _____ Date: _____

Consultant: _____ Company Name: _____

Address: _____

_____

_____

_____

Town/City: _____ Postcode: _____

Telephone/ Fax: _____ E-mail: _____

Contact Name: _____ Title: _____

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 ☐   Lease ☐   Rental ☐   Other ☐

For how many areas will viewing be required? _____

Is the system going? Indoors ☐   Outdoors ☐   Both ☐

Are the site drawings available for design purposes?   Yes ☐   No ☐

Does the drawing include wireways or ducting routes?   Yes ☐   No ☐

Is this system new or an add on?   New ☐   Add on ☐

If an add on what data of the current system exists?   Full specs ☐   Drawings ☐

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?   What hours will they be at work? _____

How many control/monitoring points are proposed? _____

Is this system interfacing to others (e.g. Fire, Access Control, etc)?   Yes ☐   No ☐

Limited system access required (e.g. Limited personnel, senior staff, etc)? _____

Special requirements for the system (e.g. Extra training, project fees, etc)? ____

During what hours can installation of the system take place? _____

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 _____ Location _____

| Camera | Internal ☐ | External ☐ | Colour ☐ | Monochrome ☐ | Fixed ☐ | Pan & Tilt ☐ |

Lens   Zoom ☐   Fixed ☐

Primary Subject Viewed _____

Environment   Inland ☐   Marine ☐   Hazardous ☐

Surface material of viewed area _____   Obstructions?   Yes ☐   No ☐

Level of ID required?   Identify ☐   Recognition ☐   Detection ☐   Monitor ☐   Number Plate ☐

Longest distance viewed [_____] m   Shortest distance viewed [_____] m

Field of view – Shortest Distance - Width [_____] m x [_____] m   Height [_____] m x [_____] m

Field of view – Longest Distance – Width [_____] m x [_____] m   Height [_____] m x [_____] m

Existing lighting – Day _____   Scene illumination _____   lux

Existing lighting – Night _____   Scene illumination _____   lux

Extra lighting necessary?   Yes ☐   No ☐   Type required? ☐   Infra-red ☐   White ☐

Camera mounting surface   Wall ☐   Ceiling ☐   Corner ☐   Tower ☐   Roof ☐   Other ☐

Mounting surface material _____   Camera to control distance _____

Cable route by _____   Common power source available?   Yes ☐   No ☐

Camera record rate (ips) _____   Event Record   Yes ☐   No ☐

Time lapse (ips) _____

Alarm (ips) _____

| Camera record quality | Time 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 locations

Switching	Yes ☐	No ☐		Channel quantity ☐				
Telemetry control	Yes ☐	No ☐	Type ☐	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 second	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 ☐	Bulkhead socket quantity ☐

Control equipment housing – Consideration:

Housing	New ☐	Existing ☐	Space available size (HxWxD) ☐		
Ventilation required	Yes ☐	No ☐			
Cable entry by	Conduit ☐	Trunking ☐	Tray ☐	Ducting ☐	Other ☐
Storage space	Yes ☐	No ☐	Working shelf depth and height ☐		
Console	Yes ☐	No ☐	Wood ☐	Formica ☐	Metal ☐
Console design help required		Yes ☐	No ☐		
Rack mount	Yes ☐	No ☐	19" format ☐	Other ☐	
Cabinet	Yes ☐	No ☐	Secure ☐	Open ☐	
Desktop mount	Yes ☐	No ☐			

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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 required integration.
- 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?

Flexibility by Design™

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 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 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	Y			
Interface to external LED sign LED required / not required	Y			
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 Plate Text /Plate Patch / VNPR Camera / Overview Camera / All	ALL
Storage Requirements Number of days storage required before overwritten	31
Interface to existing database Not required / Interface to xxxx required	N
Bespoke Software Not required / The following additions xxxxxxx are required	N
Control Options Where is the controller to be sited, is there a Network present.	N

GLOSSARY OF TERMS

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 closure.

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 AI 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 vertical.

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 lenses.

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 areas.

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 0.

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 EN50131.

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/EIA-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 medium-resolution 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 on.

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.

GLOSSARY OF TERMS

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 area

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 of a CD.

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.

EI (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 Data-link 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 output.

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 potentials.

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.

GLOSSARY OF TERMS

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 lenses.

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 range.

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.

GLOSSARY OF TERMS

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 an adapter.

NICEIC - National Inspection Council for Electrical Installation Contracting.

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 x 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 plugs.

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 LANs.

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.

GLOSSARY OF TERMS

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 75Ohm characteristic impedance. A type of coaxial cable that is most common in use in small to medium-size 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.

GLOSSARY OF TERMS

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 levels.

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 of the lens.

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 destination.

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 (75Ohm 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.

GLOSSARY OF TERMS

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 VGA.

VHS (Video Home System) - Name given to 1/2" tape format domestic video recorder.

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 160º.

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.
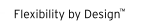
Y - The black and white video signal.

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 system.

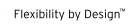**Zoom** - To enlarge or reduce the size of an image primarily by varying lens focal length.
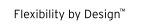
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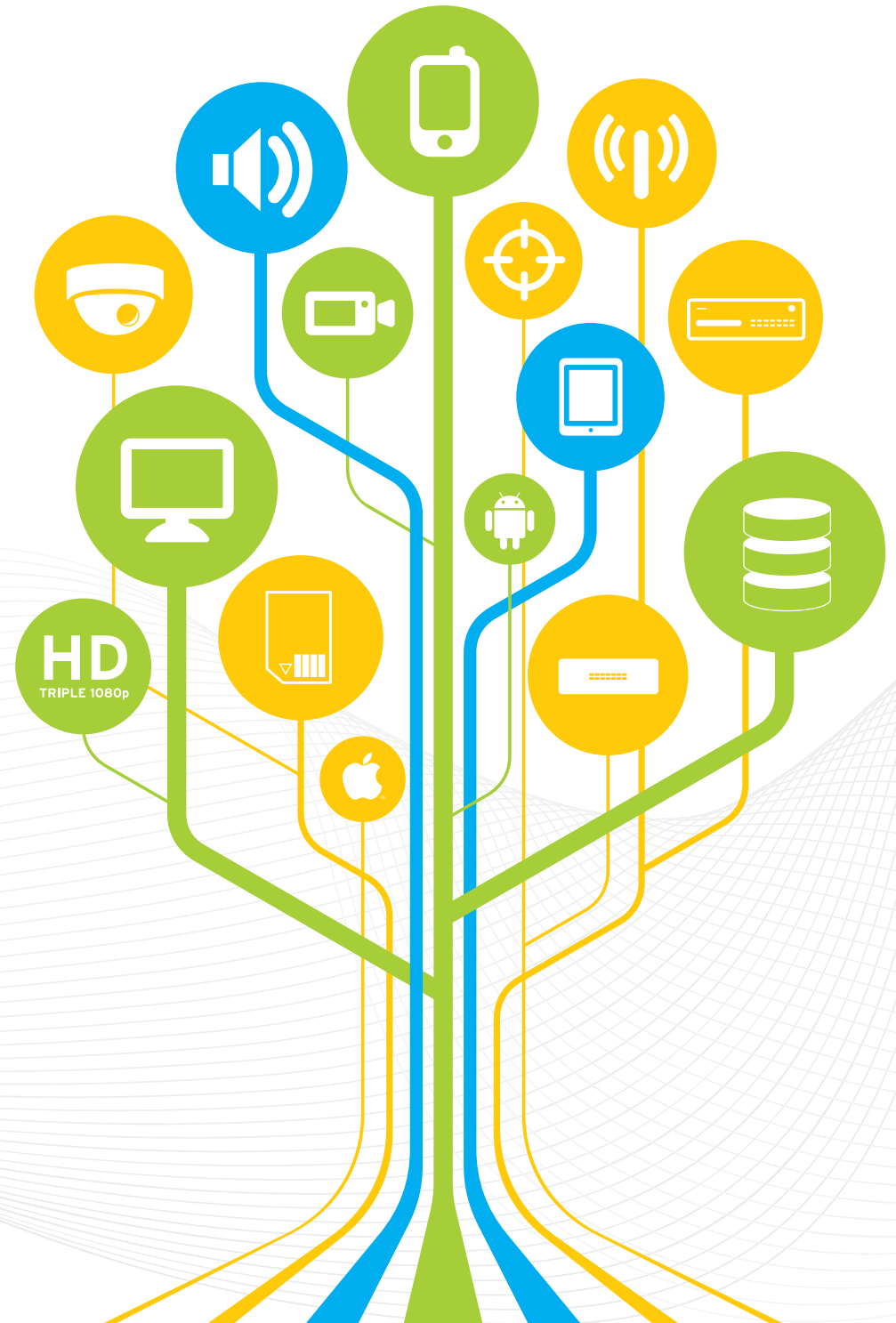
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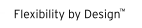
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VISTA

Flexibility by Design™

IP SOLUTIONS

Introduction

As the largest CCTV supplier in the UK, Vista is dedicated to delivering the best of breed IP video products to market. Our dedicated team of engineers is continually working with the latest technologies to ensure we are consistently delivering great products.

Within Vista we not only pride ourselves on the technical capabilities of our products, but we also firmly believe in offering the best possible customer experience. To this end, we strive to make Vista products as simple to use as possible whilst continuing to deliver exceptional performance.

CAMERAS

Our comprehensive range of cameras provides broadcast quality HD video and includes technologies such as Event Boost™ and triple streaming. Cameras are available in a number of designs to meet most project requirements.

E Series - Provides a careful balance between price and performance.

F Series - Offers superior features and motorised or PTZ lens options.

W Series - Unique range of Wireless cameras utilising industry standard WiFi.

NETWORK VIDEO RECORDERS

A simple range of recording solutions are available, offering either standalone operability or rackmount recorders designed for server room environments.

QNVR - Standalone DVR replacement with easy to use front panel controls.

VK2 Recorder - Server room style recorders offering real-time HD recording and rapid system expansion.

VK2 WiFi Recorder - Designed to work with Vista W series cameras.

COMPUTER HARDWARE

Vista provides a range of computer hardware designed and optimised for use with IP video products, including client workstations and server solutions.

SOFTWARE

A range of free of charge software options and mobile apps are available for cameras and recorders, allowing access to live and recorded video via PC or mobile device.

Onvif

VK2 E-Series

OVERVIEW

The E-Series is our most popular IP product range, providing a careful balance between price and performance. All cameras offer 1080p HD broadcast quality video and are available in a wide range of form factors making them suitable for most internal or external project requirements.

SPECIFICATION

- Full HD 1080p resolution
- Triple HD streaming
- Vista Event Boost™ technology
- Multiple form factors
- Fixed and Varifocal lens options
- IR illumination*
- Power over Ethernet
- ONVIF Profile-S Compliant
- Includes free recording software

*Model Specific

E-Series

Camera Type	VK2-1080VRDIR35V16e	VK2-1080VRDIR37e	VK2-1080VRD3V9	VK2-1080BIR35V16e	VK2-1080BIR37e	VK2-1080VFDIR37E	VK2-1080VFD	VK2-1080BXDNe	VK2-ENCODER
Product Code	0696630	0697120	0474620	0696250	0690130	0690140	0473980 (White) 0473990 (Black)	0498280	0471760
Sensor Type	1/2.8" Progressive Scan Sony CMOS	1/2.8" Progressive Scan Sony CMOS	1/2.8" Progressive Scan Sony CMOS	1/2.8" Progressive Scan Sony CMOS	1/2.8" Progressive Scan Sony CMOS	1/2.8" Progressive Scan Sony CMOS	1/2.7" Progressive Scan Sony CMOS	1/2.7" Progressive Scan Sony CMOS	N/A
Lens Type	3.5-16mm megapixel F1.2	3.7mm megapixel F1.8	3-9mm megapixel lens	3.5-16mm megapixel F1.2	3.7mm megapixel F1.8	3.7mm megapixel F1.8	3-9mm, megapixel F1.2	Sold Separately	N/A
True Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
IR Illumination	36 LEDs up to 20m range	24 LEDs up to 15m range	No	36 LEDs up to 20m range	24 LEDs up to 15m range	24 LEDs up to 15m range	No	No	N/A
Min Illumination	Colour 1.0Lux, B/W 0.0Lux IR on	Colour 0.2Lux, B/W 0.0Lux IR on	Colour 0.2Lux, B/W 0.1Lux	Colour 1.0Lux, B/W 0.0Lux IR on	Colour 0.2Lux, B/W 0.0Lux IR on	Colour 0.2Lux, B/W 0.0Lux IR on	Colour 0.9Lux, B/W 0.2Lux	Colour 2.5Lux, B/W 0.2Lux	N/A
Max Resolution (HxV)	1920x1080	1920x1080	1920x1080	1920x1080	1920x1080	1920x1080	1920x1080	1920x1080	704x576
Max Frame Rate	30ips	30ips	30ips	30ips	30ips	30ips	30ips	25ips	25ips
Video Compression	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG
No of Streams	3	3	3	3	3	3	3	3	2
Boost Function	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
BLC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Privacy Mask	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Motion Detection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Network Port	10/100Mbps	10/100Mbps	10/100Mbps	10/100Mbps	10/100Mbps	10/100Mbps	10/100Mbps	10/100Mbps	10/100Mbps
PoE	IEEE 802.3af Class 0	IEEE 802.3af Class 0	IEEE 802.3af Class 0	IEEE 802.3af Class 0	IEEE 802.3af Class 0	IEEE 802.3af Class 0	IEEE 802.3af Class 0	IEEE 802.3af Class 0	N/A
Local Power	12VDC, 6W	12VDC, 6W	12VDC, 5W	12VDC, 6W	12VDC, 6W	12VDC, 6W	12VDC, 6W	12VDC, 6W	12VDC/24VAC, 5W
Software Triggers	4	4	4	4	4	4	4	4	4
Hard Wired Alarms In and Out	No	No	2 in 1 out	No	No	No	1 in 1 out	2 in 1 out	2 in 1 out
Audio In and Out	No	No	Yes	No	No	No	No	Yes	Yes
On-Board Storage	Micro SD card up to 32GB Class 6 or above+	Micro SD card up to 32GB Class 6 or above+	Micro SD card up to 32GB Class 6 or above+	Micro SD card up to 32GB Class 6 or above+	Micro SD card up to 32GB Class 6 or above+	Micro SD card up to 32GB Class 6 or above+	Micro SD card up to 32GB Class 6 or above+	Micro SD card up to 32GB Class 6 or above+	No
IP Rating	IP66	IP66	IP66	IP65	IP67	Internal	Internal	Requires housing	Internal
Vandal Resistant	Yes (Built to IK10)	Yes	Yes (Built to IK10)	No	No	No	No	No	No
ONVIF Support	Profile-S	Profile-S	Profile-S	Profile-S	Profile-S	Profile-S	Profile-S	Profile-S	Profile-S

*Not included

VK2 F-Series

OVERVIEW

The F-Series offers a carefully selected range of cameras that feature remote lens setup or PTZ functionality. The intelligent lenses ensure optimum video quality at all times of day and night by automatically adjusting their focus on colour / mono switch over. Selected products in the range also include alarm inputs and bi-directional audio capabilities.

F-Series

Camera Type	VK2-1080XPTZ	VK2-1080XVRDPTZ	VK2-1080VRDIR3V9F	VK2-1080BIR3V9F	VK2-1080VFD3V9F/WCW	VK2-1080VFD3V9F/BCB
Product Code	0698610	0690110	0474600	0474560	0498680	0498690
Sensor Type	1/2.8" Progressive Scan Sony CMOS	1/2.8" Progressive Scan Sony CMOS	1/2.8" Progressive Scan Sony CMOS	1/2.8" Progressive Scan Sony CMOS	1/2.7" Progressive Scan Sony CMOS	1/2.7" Progressive Scan Sony CMOS
Lens Type	30x Optical 4.3-129mm, 16x Digital zoom	12x Optical 5.32-62.61mm, 16x Digital zoom	Remote setup Motorised 3-9mm, Megapixel IR corrected	Remote setup Motorised 3-9mm, Megapixel IR corrected	Remote setup Motorised 3-9mm, Megapixel IR corrected	Remote setup Motorised 3-9mm, Megapixel IR corrected
Remote Set Lens	N/A	N/A	Yes	Yes	Yes	Yes
True Day / Night	Yes	Yes	Yes	Yes	Yes	Yes
IR Illumination	No	No	24 LEDs up to 10m range	36 LEDs up to 15m range	No	No
Auto Focus On Day/Night Switch	Yes	Yes	Yes	Yes	Yes	Yes
Min Illumination	Colour 0.5Lux, B/W 0.1Lux	Colour 0.5Lux, B/W 0.1Lux	Colour 0.9Lux, B/W 0Lux IR on	Colour 0.9Lux, B/W 0Lux IR on	Colour 0.9Lux, B/W 0.2Lux	Colour 0.9Lux, B/W 0.2Lux
Max Resolution (HxV)	1920x1080	1920x1080	1920x1080	1920x1080	1920x1080	1920x1080
Max Frame Rate	60ips	60ips	30ips	30ips	30ips	30ips
Video Compression	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG
No of Streams	3	3	3	3	3	3
Boost Function	Yes	Yes	Yes	Yes	Yes	Yes
BLC	Yes	Yes	Yes	Yes	Yes	Yes
Audio	Yes	Yes	Yes	No	No	No
Alarm Inputs	1 in 1 out	2 in 1 out	2 in 2 out	No	1 in	1 in
Privacy Mask	Yes	Yes	Yes	Yes	Yes	Yes
Motion Detection	Yes	Yes	Yes	Yes	Yes	Yes
Network Port	10/100Mbps	10/100Mbps	10/100Mbps	10/100Mbps	10/100Mbps	10/100Mbps
PoE	Camera module only - IEEE802.3af Class 4	IEEE802.3af Class 3	IEEE 802.3af Class2	IEEE 802.3af Class2	IEEE 802.3af Class2	IEEE 802.3af Class2
Local Power	12VDC/24VAC, 12W	12VDC/24VAC, 12W	12VDC/24VAC, 5.5W	12VDC, 4.3W	12VDC, 3.5W	12VDC, 3.5W
Software Triggers	4	4	4	4	4	4
IP Rating	IP66 (with external housing)	IP66	IP66	IP65	Internal	Internal
On-Board Storage	Micro SD card up to 32GB Class 6 or above⁺	Micro SD card up to 32GB Class 6 or above⁺	Micro SD card up to 32GB Class 6 or above⁺	Micro SD card up to 32GB Class 6 or above⁺	Micro SD card up to 32GB Class 6 or above⁺	Micro SD card up to 32GB Class 6 or above⁺
Vandal Resistant	Yes (IK10, with clear bubble external housing)	Yes (Built to IK10)	Yes (Built to IK10)	Yes (Built to IK10)	No	No
ONVIF Support	Profile-S	Profile-S	Profile-S	Profile-S	Profile-S	Profile-S

*Not included

VK2 W-Series

OVERVIEW

The W-Series offers PoE and wireless connectivity in a variety of compact designs. All cameras offer HD quality video and are available in a number of form factors for both internal and external applications.

W-Series

Camera Type	VK2-1080MD37PTW	VK2-1080MD37W	VK2-2MPCCW
Product Code	0680430	0657100	0474680
Wireless	Built-in IEEE 802.11b/g/n wireless LAN, WEP, WPA2, WPA-PSK, WPS (Software WPS setup) (B/G/M)	Built-in IEEE 802.11b/g/n wireless LAN, WEP, WPA2, WPA-PSK, WPS (Software WPS setup) (B/G/M)	Built-in IEEE 802.11b/g/n wireless LAN, WEP, WPA2, WPA-PSK, WPS (Software WPS setup) (B/G/M)
Sensor Type	1/2.8" Progressive Scan Sony CMOS	1/2.8" Progressive Scan Sony CMOS	1/4" Progressive scan Sony CMOS
Lens Type	3.7mm, F1.8	3.7mm, F1.8	2.6mm, F1.8
Day / Night	Software Day/Night	Software Day/Night	Colour
Min Illumination	0.2Lux	0.2Lux	0.6Lux
Max Resolution (HxV)	1920x1080	1920x1080	1600x1200
Max Frame Rate	30ips	30ips	12ips
Video Compression	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG	H.264(BP/MP/HP), MPEG4(SP), MJPEG
No of Streams	3	3	3
Boost Function	Yes	Yes	Yes
Remote Pan / Tilt	Yes	N/A	N/A
BLC	Yes	Yes	No
Privacy Mask	Yes	Yes	Yes
Motion Detection	Yes	Yes	Yes
Network Port	10/100Mbps	10/100Mbps	10/100Mbps
PoE	IEEE 802.3af Class 0	IEEE 802.3af Class 0	No
Local Power	12VDC, 6W	12VDC, 6W	5VDC, 3W
Software Triggers	4	4	4
Hard Wired Alarms In and Out	1 in 1 out	1 in 1 out	No
Audio In and Out	No	No	No
On-Board Storage	Micro SD card up to 32GB Class 6 or above⁺	Micro SD card up to 32GB Class 6 or above⁺	Micro SD card up to 32GB Class 6 or above⁺
IP Rating	IP65	Internal only	Internal only
Vandal Resistant	IK09	No	No
ONVIF Support	Profile-S	Profile-S	Profile-S

Not included

Network Video Recorders

OVERVIEW

Vista offer a range of NVRs, each one providing customers with flexibility and scalability. All NVRs can record HD 1080p video, offer alarm inputs and include free management software.

NVRs

NVR Type	QNVR	QNVR with PoE	VK2-REC16HD	VK2-REC04HDW
Product Code	0690520, 0690530, 0690540, 0690550	0703220, 0703230, 0703240, 0703250, 0703260	0656330, 0656340, 0656350, 0656360	0658370, 0658380, 0658390
No of Channels	16	4/8	16	4
Monitor Outputs	HDMI and VGA	HDMI and VGA	None	None
PoE	No	Yes	No	No
Front Panel Control	Yes	Yes	No	No
Remote Joystick Keyboard	Yes	Yes	Yes - via USB and Client	Yes - via USB and Client
Recording Frame Rates	1080p up to 160ips, 720p up to 320ips, D1 up to 640ips	1080p up to 160ips, 720p up to 320ips, D1 up to 640ips	Up to 400ips at all resolutions up to 1080p	Max 100ips @ 1920x1080 Ethernet, Max 100ips @ 704x576 Wireless
Video Compression	H.264, MPEG4, MJPEG	H.264, MPEG4, MJPEG	H.264, MPEG4, MJPEG	H.264, MPEG4, MJPEG
Max Internal Hard Drive Storage	Up to 16TB	Up to 8TB	Up to 12TB	Up to 3TB
Camera Compatibility	VK2 cameras and other ONVIF Profile-S static cameras	VK2 cameras and other ONVIF Profile-S static cameras	All VK2 cameras	All VK2 cameras
Archiving Options	DVD/USB or client	DVD/USB or client	VK2-Client	VK2-Client
Recording Throughput	64Mbps per network port	64Mbps per network port	64Mbps per network port	16Mbps
Network Inputs	3 (Cameras, PC and NAS)	3 (Cameras, PC and NAS)	2 (Cameras and PC)	1
Alarm Inputs	16	4	2	8
Alarm Outputs	4	1	2	8
Seamless Stream Switching	Yes	Yes	No	No
eSATA Output	Yes	No	Yes	No
NAS Output	Yes	No	No	No
Software Supplied	QNVR, QCMS and browser	QNVR, QCMS and browser	VK2-Client and browser	VK2-Client and browser
Mobile Apps	Q-Remote, iOS and Android	Q-Remote, iOS and Android	VK2-Remote, iOS and Android	VK2-Remote, iOS and Android
Power	100~240VAC, 50~60Hz, 100W	NVR-12VDC/3.5A, PoE 48VDC (12W per channel)	100 - 240VAC, 50/60 Hz 70W	12VDC 5A DC 60W
Dimensions (WxDxH)	450x370x90mm	352x252x71mm	570x245x560mm	190x60x255mm
Weight	5Kg	3Kg	8.9Kg	1.3Kg
WiFi Camera Connection	No	No	No	Integrated 2.4GHz 802.11 B/G/N with WPS support
Approvals	CE RoHS2: 2011/65/EU	CE RoHS2: 2011/65/EU	CE RoHS2: 2011/65/EU	CE RoHS2: 2011/65/EU

Flexibility by Design™

Hardware

CLIENT PC OVERVIEW

The Vista Client PC has been designed specifically for the video surveillance market. Its powerful performance and small size make this the perfect Video Management System (VMS) viewing client.

CLIENT / SERVER PC OVERVIEW

Vista's Client / Server PC has the performance and storage capacity to make it ideal for Video Management Systems.

SPECIFICATION

Processor: Intel i5 3.4GHz
Memory: 4GB
Disk Space: 120GB
Graphics: Dedicated 1GB Nvidia (Dual Monitor)
Power Requirements: 150W
Operating System: Windows 7 Pro 64bit

- Solid State OS Disk (Quick Boot)
- Tiny foot print
- Intel i5 processor
- Compatible with VK2-Client/QCMS
- Support for 3rd party VMS clients

Model No. VistaPC-i5-120-s
Product Code: 0657170

SPECIFICATION

Processor: Intel i7 3.4GHz
Memory: 8GB
Operating System Disk Space: 120GB
Recording Disk Space: up to 21TB
Graphics: Dedicated 1GB Nvidia (Dual Monitor)
Power Requirements: 250W
Operating System: Windows 7 Pro 64bit

- Solid State OS Disk (Quick Boot)
- Up to 21TB on-board storage
- Intel i7 processor
- Compatible with VK2-Client/QCMS
- Support for 3rd party VMS clients

Model No. VistaPC-i7SVR-xxTB
Product Code: 0680600, 0680610, 0680620, 0680630, 0680640

IP Monitor

OVERVIEW

Until now, IP systems have required a conventional monitor and decoder to be used, providing D1 resolution images. The new 24″ and 32″ IP networked monitors from Vista don't require a hardware decoder and can display high-definition, 1080p video from a single stream or four D1 streams from separate cameras in quad format. Extremely simple to set up, this provides higher resolution images over previous solutions of a decoder and analogue monitor. Because it's based on ONVIF, it decodes streams from 3rd party cameras – providing the user with the greatest flexibility possible.

SPECIFICATION

- 24″ and 32″ monitor options
- Connects direct to IP network
- Built-in 4 camera decoder
- Full screen HD display
- 4 camera full HD sequence
- 4 camera quad display – D1 resolution per camera
- Desk mount or VESA mount
- ONVIF compliant

Model No. VFS24HDIP / VFS32HDIP
**Product Code: 0703480 (24″), 0704010 (32″)**

Software Packages

VK2-CLIENT OVERVIEW

VK2-Client boasts a number of features usually associated with high-end licensed Video Management Software (VMS), including viewing of up to 128 live video streams across 2 monitors, local recording of up to 32 video streams and interactive graphical maps.

Fully compatible with Vista VK2 cameras and the VK2 Recorders, VK2-Client provides both live and recorded video from the VK2 Recorders and/or SD card within the VK2 camera itself.

The software is supplied free of charge, requires no licenses and is supplied with all VK2 products.
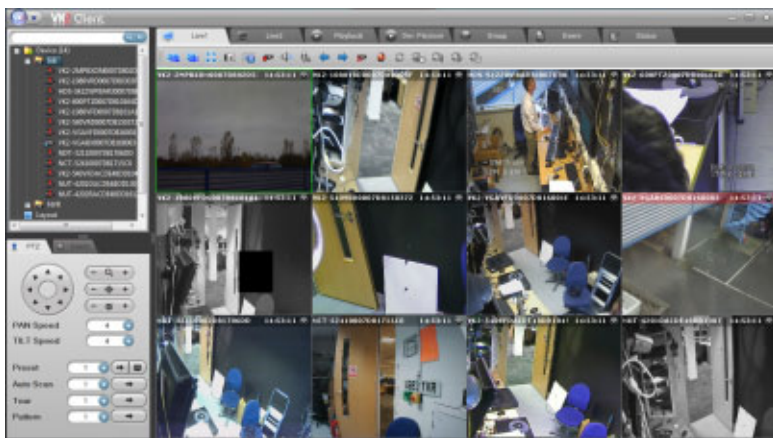
SPECIFICATION

- View and record up to 32 cameras
- Access video recorded to SD card on Vista VK2 cameras
- PTZ control
- Graphical maps
- Alarm management
- Camera discovery

QCMS OVERVIEW

QCMS is a powerful VMS package supplied free of charge with every Vista Quantum NVR and analogue DVR. It allows the operator to connect to multiple units at the same time, providing the ability to display IP and analogue cameras on a single monitor.

The operator, depending on their access level, is allowed to view live images, review playback, download and archive video, control PTZ cameras and configure the settings on the NVRs and DVRs.

Up to 64 images can be displayed on a single screen.

SPECIFICATION

- Connect to multiple Quantum 960H, XTRA, PLUS, EVO and the Quantum NVR
- Display live images from multiple units
- Review playback from multiple units
- Download archived footage
- Control telemetry pan and tilt cameras
- Configure the settings of units remotely

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qulu

Enter a new era of power, performance and freedom with Vista's new Video Management Software (VMS), qulu. Designed to offer the most efficient performance on the market today, this revolutionary software allows users to interact with video like never before.

KEY FEATURES/BENEFITS

Supports 3rd party cameras, including fisheye cameras
qulu provides choice and flexibility when it comes to choosing the right camera for your project, currently supporting around 300 camera makes and models from brands such as Axis, Arecont, Samsung, Vivotek and Vista VK2.

Our own fisheye 360° dewarping technology dewarps video from almost any fisheye camera, allowing the ability to generate multiple camera views from a single camera. This unique feature provides unprecedented levels of live and recorded interrogation.

Support for Windows, Linux and Apple Mac operating systems
Customers can use the operating system they're most comfortable with. Most competitors can't offer this level of flexibility and functionality.

Simple pricing structure
No base license, no client license, no annual support fees, no upgrade charges. We believe this is the simplest video system on the market to specify.

Interrogate live and recorded video
Select multiple regions of interest and view all scenes simultaneously. Easily track across multiple cameras and zoom in to further investigate a chosen scene.

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FISHEYE CAMERAS **INTERROGATE A SCENE** **POWERFUL SEARCH FUNCTION**

Quick, simple search function
Search intelligently by highlighting an area on screen – qulu will display any motion events in that area within seconds.

Small, easily downloadable software packages
Download and install qulu before most other VMS packages have even downloaded. Ideal for areas with limited internet access as often found on-site.

Self monitoring for system optimisation
qulu constantly monitors all aspects of the system, including CPU, memory, network and hard drives. The software will automatically alert users to any weaknesses and intelligently compensate to reduce load on the system.

Reduced cost of ownership
Save money on hardware due to the requirement for fewer system resources compared to other VMS packages on the market.

30 day free download
Vista is so confident that you'll be blown away by qulu, we're providing a 30 day free trial of the software. Download you copy from **www.vista-cctv.com/product/qulu**.

Request a demo
To truly understand the power of the software, why not benefit from one of our experts for a demonstration. These can either take place in our fully stocked demo rooms, or at a location convenient to you.

Online video
It doesn't take long to understand the power and flexibility that qulu offers. Our brief, **online video** will give you a great introduction to the software and why it's unique on the market.

ORDERING INFORMATION

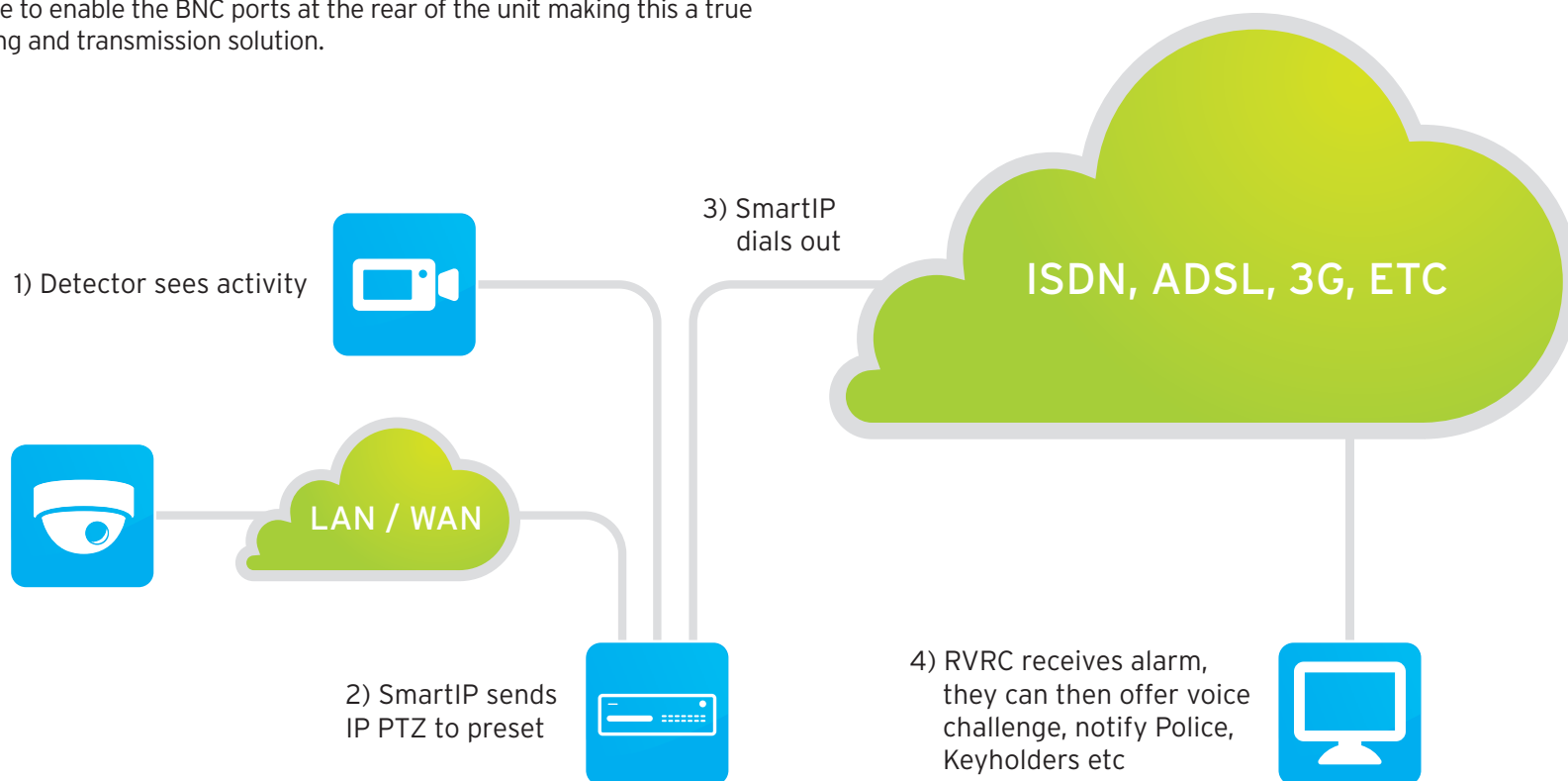|	
0480800	Single Camera License
0480810	Camera License - 10 Pack
0480820	Camera License - 20 Pack
0480850	Camera License - 50 Pack
0480900	Camera License - 100 Pack

SmartIP Video Transmission

OVERVIEW

A highly efficient real-time IP camera recording and alarm transmission solution, SmartIP provides the ideal solution for all remote monitoring applications. With functionality based on the popular SmartDisc, the SmartIP caters for the connection of standard or megapixel IP cameras, providing EoL monitored alarm inputs and a 16,000 event log for BS8418:2010 compliance.

SmartIP is compatible with a wide range of IP camera manufacturers and provides an excellent starting platform for users to move into IP for remote transmission. For sites where analogue cameras are also required there is a plug in card available to enable the BNC ports at the rear of the unit making this a true Hybrid recording and transmission solution.

SPECIFICATION

- Efficient compression designed for video transmission over low bandwidths
- BS848:2010 compliant
- Up to 10 IP cameras
- Support for multiple camera manufacturers

- Up to 4TB on-board storage
- Integrated audio
- PTZ Camera support
- Basic and advanced levels of management software available

1) Detector sees activity

3) SmartIP dials out

ISDN, ADSL, 3G, ETC

LAN / WAN

2) SmartIP sends IP PTZ to preset

4) RVRC receives alarm, they can then offer voice challenge, notify Police, Keyholders etc

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SmartIP Software

SOFTWARE SUITES

Designed to meet the most demanding of requirements, there are 3 levels of software available:

SmartControl LITE: free of charge, stand alone software for a single site connection - for engineers and end users

SmartControl PRO: stand alone software, with multi-site connectivity (up to 21) - for start up monitoring centres

EMS: server based Event Management System software with multi-site connectivity (up to 50) and site map module – for monitoring centres wanting to offer BS8418

Videowall: supports up to 64 video streams on up to 4 monitors

S_Remote: iOS app for remote viewing of sites, with live view, playback, PTZ control, relay operation and arm/disarm

SmartIP Software Type	LITE	PRO	EMS
System architecture	Single PC	Single PC	Server / Client
Simultaneous connections	1	21	50
Max number of transmitters	6000	6000	Unlimited
Transmitter multi view modes	1, 4, 10ch	1, 4, 10ch	1, 4, 10ch
Remote configuration of transmitters	Yes	Yes	Yes
PTZ control	Yes	Yes	Yes
Relay control	Yes	Yes	Yes
Logfile operator comments	No	Yes	Yes
Transmitter specific information text	No	Yes	Yes
Scheduled arm/disarm	No	No	Yes
Site maps	No	No	Yes
HT Heath check	No	No	Yes
Automated firmware update tool	No	No	Yes

Notes

Flexibility by Design™

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