InVid Tech
Innovative Video Technology

PARAMONT TVI
PARAMONT IP
ULTRA TVI ULTRA IP

Paramont Series TVI Cameras

PARAMONT TVI

	PAR-C2BIR2812	PAR-C2DIR	PAR-C2DRIR2812	PAR-C2TXIR	PAR-C2TXIR2812
Product Description	2 Megapixel/1080p VF TVI Bullet	2 Megapixel/1080p TVI Fixed Rugged Dome	2 Megapixel/1080p TVI VF Rugged Dome	2 Megapixel/1080p Fixed TVI Turret	2 Megapixel/1080p VF TVI Turret
Image Sensor	1/3" CMOS				
Resolution	1920 x 1080				
Image System	NTSC/PAL				
Auto Iris	Fixed Iris				
Min Illumination	0 Lux (IR On)				
Lens	2.8-12mm	3.6mm	2.8-12mm	3.6mm	2.8-12mm
Lens Mount	D14	M12	D14	M12	D14
IR Distance	164'	65'	98'	65'	98'
Environmental	IP66 Weather Resistant	IP66 Weather Resistant & IK10 Vandal Proof		IP66 Weather Resistant	
Video Output	TVI & AHD / CVBS Selectable				
Image Size	1080p (1920 x 1080)				
Frame Rate	30 FPS (60Hz), 25 FPS (50Hz)				
Angle Adjustment	3-Axis	2-Axis	3-Axis	3-Axis	3-Axis
Screen Display	2 Languages Supported (English & Chinese)				
Function Control	OSD/UTC				
Day & Night	Yes (ICR)				
BLC & HLC	Yes				
WDR	Digital WDR				
Digital NR	Yes				
Defect Correction	Live Defective Pixel Correction				
S/N Ratio	>52dB (AGC Off)				
Electronic Shutter	1/60s ~ 1/100000s (NTSC), 1/50s ~ 1/100000s (PAL)				
AGC	Yes				
White Balance	ATW, AWC-SET, Manual				
Advanced Image	Adjustable Sharpness, Saturation, Brightness				
Power Supply	DC12V (+ 10%)				
Working Environment	-4° ~ 122° F (-20° ~ 50° C) 10%~90% Humidity				
Dimensions	Ø 4.29 x 11.18" (Ø109 x 284mm)	Ø 4.56 x 3.58" (Ø116 x 91mm)	Ø 5.9 x 4.48" (Ø 150 x 114mm)	Ø 3.42 x 4.25" (Ø 87 x 108mm)	Ø 4.29 x 5.11" (Ø 109 x 130mm)
Mounting Options	IPM-DRPM1*, IPM-DRWM1*, IPM-JB1, IPM-JB2	IPM-DRPM1*, IPM-DRWM1*, IPM-JB1	IPM-DRPM1*, IPM-DRWM1*, IPM-DWM3, IPM-JB3	IPM-DRPM1*, IPM-DRWM1*, IPM-JB2	
Ordering Info	PAR-C2BIR2812 2.8-12mm	PAR-C2DIR36 3.6mm	PAR-C2DRIR2812 2.8-12mm	PAR-C2TXIR36 3.6mm	PAR-C2TXIR2812 2.8-12mm

1080p

TVI, AHD/CVBS

True Day/Night

UTC Up The Cable Control

D-WDR

IP66 Weather Resistant

DC12V

Mounting Options

IPM-JB1 Junction Box #1

IPM-JB2 Junction Box #2

IPM-JB3 Junction Box #3

IPM-DRPM1 Pendant Mount #1 Must be used with IPM-JB2

IPM-DRWM1: Wall Mount #1 Must be used with IPM-JB2

IPM-DRWM3 Wall Mount #3

Want to know about the latest product updates?

www.invidtech.com/updates

New Product Releases, Firmware Updates, New Housing & Lens Options on your Favorite Cameras, Software & App Releases, Promotions Available through Authorized Resellers & More!

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Innovative Video Technology

Paramont Series TVI Recorders

PD1A-4/PD1A-8   PD1A-16

PARAMONT

Bonus IP Channels	P2P Connectivity	H.264
HDMI 1080p Main Monitor	VGA Main Monitor	CVBS Main/Spot
Simultaneous Playback	Thumbnail Search	Free App iOS & Android
FREE CMS	Free MAC Client	

Standard Features

- Bonus IP Channel - Up to 2/3 Megapixel
- True P2P Connectivity with QR Code Connect
- H.264 Video Compression
- Simultaneous HDMI/VGA up to 1080p Resolution
- CVBS Main or Spot Monitor
- Simultaneous Playback

- Multiple video search options including Thumbnail Search for quick retrieval of footage.
- Free iOS & Android Apps for Smart Phones & Tablets
- Free Central Management Software (CMS) to manage multiple units & sites from a single platform
- Free MAC client

	PD1A-4	PD1A-8	PD1A-16
Intelligent Video Inputs			
Analog HD/SD Inputs	4	8	16
HD Video Resolutions	TVI/AHD 2.0 1080p, 720p, Analog, WD1 Real-Time		
Analog CVBS Video Input	Up to 960x480,720x480(NTSC); 960x576,720x576(PAL)		
Adaptive Ports	Input Format Auto Detection, HD/SD can be mixed in any combination, at any time		
Interface	BNC Connector; 1V p-p, 75Ω		
Privacy masking	4 areas programmable in OSD menu		
Additional IP PnP Ch	1 (up to 2Mpixel)	1 (up to 3Mpixel)	4 (up to 3Mpixel)
Additional IP PnP Ch Frame Rate	1080p/960p/720p: 30/25 FPS	3 MP: 15/12 FPS, 1080p/960p/720p: 30/25 FPS	120/100 FPS
Total Cameras Supported	5	9	20
Video Output			
Main HDMI & VGA	HDMI & VGA: 1920x1080, 1280X1024, BNC x 1: CVBS (used as the main or Spot output, Sequence only))		
CVBS Analog BNC	NTSC 704x480 / PAL 704x576; 1V p-p, 75Ω		
Display Modes	1, 2x2, 1+5, 1+7, 1+12, 3x3, 4x4, 5X5 split; User Defined Sequence / Alarm Pop-up		
Recording			
Video Compression	Standard H.264 High Profile		
Video Bitrate	768Kbps ~ 8Mbps		
Encoding	Main/Sub Stream: 1080p (virtual real time to 15FPS max per camera); 1080P Lite;720p; WD1; 4CIF; VGA; CIF (30FPS per camera)		
Frame Rate	Main Stream: 1/16 fps ~ Real time frame rate (real time at 720p and lower resolutions)		
Sub Stream: 1/16 fps ~ Real time frame rate	Sub Stream: 1/16 fps ~ Real time frame rate		
Mode	Continuous; Motion; Alarm; Motion+Sensor, Continuous+ Sensor, Continuous+Motion+Sensor		
Motion Detection	Configurable per camera for area(s), sensitivity and arming schedule programmable by day of week and hour of day		
Schedule Period	Per day; or 25 time periods per day		
Pre- and Post- Event Recording	Pre-record 3 or 5 seconds; post record 5s~10 minutes		
Playback			
Synchronous Playback	4 channels	8 channels	16 channels
Playback Resolution	1080p, 720p, WD1, 4CIF, VGA, CIF, QVGA, QCIF		
Search Type	Time/Date; Thumbnail Search; Event Search (Manual, Sensor, Motion)		
Capacity	Up to record rate		
Playback Controls	Play; Pause; Forward/Reverse; speed control for single~1/32~32x		
Digital Zoom During Playback	Supported on Local Displays and CMS + Web		
Event & Alarm			
Event Source	MD (Motion Detection), Video Loss,Exceptions		
Event Action Schedule	Per day; or 25 time periods per day		

Event Action	Buzzer, E-mail, Alarm Full Screen Pop-up		
MD Area	User selectable grid pattern 22x18 areas with adjust per cam sensitivity		
System Alarm			
Alarm Source	HDD Error, HDD Full, No Disk, LAN Fail/Address Conflict, Illegal Access,		
Alarm Action	Buzzer, E-mail, Alarm Full Screen Pop-up		
Audio			
Two-way audio	Audio input pass through to remote web or CMS client; remote audio from web or CMS client pass through to audio output		
Input / Output	4ch Input / 1ch Output; RCA, 2V p-p, 1KΩ		
Compression	Up to 64Kbps, G.711u		
Network			
Interface	10/100 Base-T Ethernet RJ-45		
Addressing	Static IP, DHCP, P2P QR Connect		
NTP/DST	Supported; choice of time zone, NTP server, DST start/end/offset		
Protocols Supported	TCP/IP, PPPoE, DHCP, DNS, DDNS, NTP, SMTP, SNMP, NFS, iSCSI, UPnP™, HTTPS, Plug-and-Play (for connected IP Cams), Utility Device Discovery		
NAT	uPnP router NAT/port mapping forwards ports automatically (*Router must support/permit uPnP function)		
Users	Up to 5 simultaneous connected users		Up to 6 simultaneous connected users
DDNS	Auto DDNS, free service tracks WAN IP address		
Security			
User IDs	"Admin", plus multiple configurable login IDs		
User Levels	All rights for "admin"; Per camera per user rights assignment for Operator and User levels		
User Privilege Control	Local and remote access to Live views, audio, recording, playback, menus, PTZ, alarms, copy, logs, upgrade, reboot and camera views		
Storage & Clip Copy			
HDD Storage	1 SATA HDD up to 6Tb	1 SATA HDD up to 6Tb	2 SATA HDD up to 6Tb
Copy Type	Multi-Channel or Single Channel File		
Copy Device	USB 2.0 Drive (2 ports)		
S.M.A.R.T.	Temperature, duration, error rates, bad sector detection, and more		
Serial & I/O			
USB 2.0 Ports	USB 2.0, Front and Rear		
RS-485	One; selectable speed and bit pattern; multiple protocols (Pelco P, Pelco D, others)		
Up the Cable Control	Multiple protocols, can be sent out of any BNC port to compatible cams		
User Controls			
Local Controls	Front Panel function and navigation buttons; IR Remote; Mouse		
Software			
Web Viewer	Live view, playback and configuration via IE, Firefox, Safari (with free plug-in/extension installed)		
User Rights Control	Per user-per camera for multiple functions		
Mobile Viewer	iOS and Android supported ; live 16 camera views; 4 camera playback; snapshots from live or play; copy clips/record to smartphone; audio support; PTZ control. HD version of app, optimized for tablets		
CMS	Free PC and MAC Clients support multiple device viewing, playback (with digital zoom) and configuration; user rights per camera; E-map support; live view up to 1000 cameras; up to 16 cameras in playback		
Event Logging	Multiple types: alarm, exception, operation, settings		
Firmware Upgrade	From USB		
Backup/Restore Config	From USB or remotely		
General			
Dimension (W x H x D)	11.81 x 10.62 x 2.16"		16.92 x 11.81 x 2.16"
Chassis Type	Standalone 1U chassis	Standalone 1U chassis	19" Rack-Mountable 1U Chassis (Using optional brackets)
Operating Temp	14°F~122°F (-10°C~50°C)		
Operating Humidity	10% ~ 90%		
Voltage	12VDC from included power supply, 4 pin DIN; power supply input voltage 100~220 VAC 50~60Hz		
Power	<5W (without HDD)	<8W (without HDD)	< 15W (without HDD)
Certifications	FCC, CE		
Ordering Info	PD1A-4/2T PD1A-4/4T PD1A-4/6T	PD1A-8/2T PD1A-8/4T PD1A-8/6T	PD1A-16/2T PD1A-16/4T PD1A-16/6T PD1A-16/8T PD1A-16/12T

PD1A-32:
32 Ch Universal HD-TVI Recorder
Visit www.invidtech.com for more info!

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Ultra TVI Series Cameras

Model Number	ULT-C2BXIR2812	ULT-C2TXIR2812	ULT-C2TIRM2812	ULT-C2BIRM2812	ULT-C2BXIRA550	ULT-C2RICS
Image Sensor	1 / 3" Progressive Scan CMOS					
Signal System	PAL / NTSC					
Effective Pixels	1920(H)*1080(V)					
Min. Illumination	0.01 Lux @ (F1.2,AGC ON),0 Lux with IR 0.014 Lux @ (F1.4,AGC ON),0 Lux with IR				Color: 0.01 Lux & B/W: 0.001 Lux @ (F1.2,AGC ON)	
Shutter Speed	1/25 s to 1/50,000s					
Lens (Angle of View)	2.8-12mm @ F1.4, (92° – 32°)	2.8-12mm @ F1.4, (92° – 32°)	2.8-12mm	2.8-12mm @ F1.4, (92° – 32°)	5-50mm (59.8° ~ 6.2°)	Sold Separately
Auto Iris	Yes					DC Drive
Lens Mount	φ14	φ14		φ14	φ14	C/CS Mount
Day & Night	IR Cut Filter with Auto Switch					
Wide Dynamic Range	True WDR, 120 dB	True WDR, 120 dB	DWDR	DWDR	True WDR 120 dB	
Synchronization	Internal synchronization					
Video Frame Rate	1080p @ 30fps					
HD Video Output	1 Analog HD output	1 Analog HD output	1 Analog HD output	1 Analog HD output	1 Analog HD output	1 HD TVI output
CVBS Output	1Vp-p Composite Output(75Ω / BNC)	n/a	n/a		1Vp-p Composite Output(75Ω / BNC)	
S / N Ratio	More than 52dB					
Scene	Indoor, Outdoor, Indoor1, LOW-LIGHT					
Camera ID	On/off (15 characters, position programmable)					
AGC	Support					
D/N Mode	Color/BW/EXT					
White Balance	ATW, AWC-SET, Indoor, Outdoor, Manual					
Privacy Mask	On/Off, maximum 8 zones	On/Off, maximum 8 zones	On/Off, maximum 2 zones	On/Off, maximum 2 zones	On/Off, maximum 8 zones	
Motion Detection	On / Off, maximum 4 Zones					
BLC	Support					
Anti-flicker	On/off					
Language	English, Japanese, CHN1, CHN2, Korean, German, French, Italian, Spanish, Polish, Russian, Portuguese, Dutch, Turkish, Hebrew and Arabic					
Function	Eclipse, Digital noise reduction, Digital zoom(62x), Slow shutter, Mirror, Defog, Defect pixel correction, SMART D-ZOOM					
Working Temp	-4 °F – 140 °F					--22 °F – 140 °F
Humidity	Humidity 90% or less (non-condensing)					
Power Supply	12 VDC; 24 VAC	12 VDC		12 VDC; 24 VAC		
Power Consumption	12V DC: Max. 7W ; 24V AC: Max. 10W	Max. 7W	12V DC: Max. 5W	12V DC: Max. 7W ; 24V AC: Max. 10W	12V DC: Max. 11W ; 24V AC: Max. 11W	Max. 4.5W
Housing	IP66				IP66	
IR Range	Up to 150 ft	Up to 150 ft	Up to 120 ft	Up to 150 ft	Up to 300 ft	
Communication	Up the coax(need UTC controller) Protocol: Pelco-C(Coaxitron)					
Dimensions	11.84 × 3.97 ×4.23 in	φ5.14 × 3. 67 in	φ5.1 x 4 in	3.62 x 3.34 x 10.6 in	12.3 x 3.9 x 4.2 in	2.7 x 2.3 x 5.85 in
Weight	1.54 lbs	0.66 lb	0.9 lb	1.59 lbs	3.75 lbs	1.59 lbs
Mounting Options	IUM-BRJB1, IUM-BRCM1*, IUM-BRPM1*	IUM-TRJB1, IUM-TR-WM1, IUM-BRCM1*, IUM-BRPM1*	IUM-TRJB1, IUMBRCM1*, IUM-BRPM1*	IUM-BRJB1, IUM-BRCM1*, IUM-BRPM1*		n/a
Ordering Info	ULT-C2BXIR2812: 2.8-12mm	ULT-C2TXIR2812: 2.8-12mm	ULT-C2TIRM2812: 2.8-12mm	ULT-C2BIRM2812: 2.8-12mm	ULT-C2BXIRA550: 5-50mm	ULT-C2RICS: Box

2 Megapixel

True Day/Night

UTC Up The Cable Control

OSD

IP66 Weather Resistant

Operates to -40° F

Mounting Options

IUM-BRCM1* Corner Mount #1

IUM-BRJB1: Large Bullet Junction Box #1

IUM-BRPM1* Pole Mount #1

IUM-TRJB1: Turret Junction Box #1

IUM-TRWM1: Turret Camera Wall Mount #1

Ultra TVI Series Camera with Auto-Focus Motorized Lens

Complete Specs Available www.invidtech.com

ULT-C2BXIRA2808: White, ULT-C2BXIRA2808B: Black
2 Megapixel/1080p TVI Auto-Focus Motorized
2.8-8mm Bullet 164' EXIR Range, 12VDC
Junction Box - IUM-DBAJBW: White IUM-DBAJBB: Black

ULT-C2TXIRA2808
2 Megapixel/1080p TVI Auto-Focus Motorized
2.8-8mm Turret 164' EXIR Range, 12VDC

Ultra TVI Miniatures

ULT-ALLMIFP43: Indoor, 4.3mm
All-In-One 2 MP/1080p TVI/CVI/
AHD or Analog Miniature Square

ULT-ALLMIP43: Indoor, 4.3mm
All-In-One 2 MP/1080p TVI/CVI/
AHD or Analog Miniature Square

ULT-ALLMIB36: Indoor, 3.6mm
All-In-One 2 MP/1080p TVI/CVI/
AHD or Analog Miniature Square

ULT-ALLCRB36: Outdoor 3.6mm
All-In-One 2 MP/1080p TVI/CVI/
AHD or Analog Miniature Cylinder

ULT-ALLCI12: Indoor 12mm
All-In-One 2 MP/1080p TVI/CVI/
AHD or Analog Miniature Cylinder

OSD remote attached to cable on miniature squares. Cables available without OSD controller.
Factory can preset and change cable to standard type (OSD not available with standard cable).

*To use these mounts with the selected cameras drill the holes needed into the mount using the diagram included with the camera.
InVid Tech, reserves the right to make changes to improve our products at any time without notice; we are not responsible for misprints.

Ultra TVI Series Cameras

ULTRA

	ULT-C2BIR	ULT-C2TXIR28	ULT-C2BIR2812	ULT-C2DRIR2812D
Model Number	ULT-C2BIR	ULT-C2TXIR28	ULT-C2BIR2812	ULT-C2DRIR2812D
Image Sensor	1 / 3" Progressive Scan CMOS			
Signal System	PAL / NTSC			
Effective Pixels	1920(H)*1080(V)			1930(H)*1088(V)
Min. Illumination	0.01 Lux @ (F1.2,AGC ON),0 Lux with IR 0.014 Lux @ (F1.4,AGC ON),0 Lux with IR			0.1 Lux @ (F1.2, AGC ON), 0 Lux with IR
Shutter Speed	1/25 s to 1/50,000s			
Lens (Angle of View)	2.8mm (90°)	2.8mm	2.8 – 12 mm @ F1.4 Angle of View: 102° – 35°	
Auto Iris	Yes			
Angle Adjustment	Pan: 0 – 360°, Tilt: 0 – 90°, Rotation: 0 – 360°	Pan: 0 – 360°, Tilt: 0 – 75°, Rotation: 0 – 360°	Pan: 0 – 360°, Tilt: 0 – 90°	n/a
Day & Night	IR Cut Filter with Auto Switch			
Wide Dynamic Range	DWDR	True WDR, 120 dB	DWDR	
Synchronization	Internal synchronization			
Video Frame Rate	1080p @ 30fps			
HD Video Output	1 HD-TVI out up to 1200ft with RG59U 95%			
CVBS Output	1Vp-p Composite Output(75Ω / BNC)			
S / N Ratio	More than 52dB			
Scene	Indoor, Outdoor, Indoor1, LOW-LIGHT			
Camera ID	On/off (15 characters, position programmable)			
AGC	Support			
D/N Mode	Color/BW/EXT			
White Balance	ATW, AWC-SET, Indoor, Outdoor, Manual			
Privacy Mask	On/Off, maximum 2 zones			
Motion Detection	On / Off, maximum 4 zones			
BLC	Support			
Anti-flicker	On/off			
Language	English, Japanese, CHN1, CHN2, Korean, German, French, Italian, Spanish, Polish, Russian, Portuguese, Dutch, Turkish, Hebrew & Arabic			
Function	Digital noise reduction, Digital zoom(62x)			
Working Temperature	-40 °F – 140 °F			
Humidity	Humidity 90% or less (non-condensing)			
Power Supply	12 VDC±10%		Dual Volt: 12 VDC, 24 VAC	
Power Consumption	Max. 3W	Max. 3W	Max. 5W	Max. 5W
Housing	IP66			IP66, IK10
IR Range	Up to 60 ft	Up to 120 ft	Up to 120 ft	Up to 120 ft
Communication	OSD (UTC Control) via DVR			
Dimensions	φ2.76 × 5.89 in	φ4.33 x 3.67 in	3.62 x 3.34 x 10.6 in	θ5.72 x 4.9 in
Weight	0.79 lb	0.57lbs	1.52lbs	1.95lbs
Mounting Options	n/a	IUM-TRJB1, IUMBRCM1*, IUM-BRPM1*	IUM-BRJB1, IUMBRCM1*, IUM-BRPM1*	IUM-DRJB2, IUM-DRWM2, IUM-DRPM2, IUMBRCM1*, IUM-BRPM1*
Ordering Info	ULT-C2BIR28: 2.8mm	ULT-C2TXIR28: 2.8mm	ULT-C2BIR2812: 2.8-12mm	ULT-C2DRIR2812D: 2.8-12mm

Feature callouts

- 2 Megapixel
- True Day/Night
- UTC Up The Cable Control
- OSD
- IP66 Weather Resistant
- Operates to -40° F

Mounting Options

- IUM-BRCM1* Corner Mount #1
- IUM-BRJB1: Large Bullet Junction Box #1
- IUM-BRPM1* Pole Mount #1
- IUM-DRJB2: Large Dome Junction Box #2
- IUM-DRPM2: Pendant Mount #2
- IUM-DRWM2: Large Dome Wall Mount #2
- IUM-TRJB1: Turret Junction Box #1

*To use these mounts with the selected cameras drill the holes needed into the mount using the diagram included with the camera.

Ultra Series TVI PTZs

ULT-C2PTZXIR23:
2 Megapixel TVI PTZ, 23x Zoom, 360' IR Distance, AC24V

ULT-C3PTZXIR30: 3 Megapixel TVI PTZ 30x Zoom, 450' IR Distance, AC24V

ULT-C2PTZ23 HD-TVI PTZ, 23x Zoom

ULT-C2PTZXIR30: 2 Megapixel TVI PTZ 30x Zoom, 360' IR Distance, AC24V

ULT-C2PTZ23R HD-TVI 1080P Interior 23x PTZ Camera

Ultra PTZ Mounting Options

- IUM-PTZPEN1
- IUM-WALL1
- IUM-PTZPEN2
- IUM-PTZPOLE

For Full PTZ Specs and additional mounts visit www.invidtech.com

Ultra Series TVI Cameras

Model Number	ULT-C3BXIRM2812	ULT-C3DRXIRM2812	ULT-C3TXIRM2812	ULT-C3TXIR28
Image Sensor	3MP CMOS			
Signal System	PAL / NTSC			
Effective Pixels	2052(H)*1536(V)			
Min. Illumination	0.01 Lux @ (F1.2,AGC ON),0 Lux with IR			
Shutter Speed	1/25 s to 1/50,000 s			
Lens	2.8-12mm @ F1.2 Motorized, Angle of view: 92° – 32°			2.8mm Angle of View: 103.5°
Auto Iris	Yes			
Angle Adjustment			Pan: 0 – 360°, Tilt: 0 – 75°, Rotation: 0 – 360°	Pan: 0 – 360°, Tilt: 0 – 75°, Rotation: 0 – 360°
Day & Night	IR Cut Filter with Auto Switch			
Wide Dynamic Range	120dB True WDR			
Synchronization	Internal synchronization			
Video Frame Rate	2052*1536@18fps			
HD Video Output	1 Analog HD output	1 Analog HD output	1 Analog HD output	1 HD-TVI output
S / N Ratio	More than 62dB	More than 62dB		More than 62dB
Scene	Indoor, Outdoor, Indoor1, Low-Light			
Camera ID	On/off (15 characters, position programmable)			
AGC	Support			
D/N Mode	Color/BW/Smart			
White Balance	ATW, MWB			
Privacy Mask	Support	Support	On/Off, maximum 8 zones	On/Off, maximum 8 zones
Motion Detection	On/Off, maximum 4 zones			
BLC	Support			
Anti-flicker	On/Off			
Language	English, Japanese, CHN1, CHN2, Korean, German, French, Italian, Spanish, Polish, Russian, Portuguese, Dutch, Turkish, Hebrew and Arabic			
Function	Digital noise reduction, Digital zoom(62x)			WDR, DNR, Mirror, Smart IR
Working Temp	-40 °F – 140 °F (-40 °C – 60 °C) Humidity 90% or less (non-condensing)			
Power Supply	12 VDC, 24 VAC	12 VDC, 24VAC	12 VDC	12 VDC±10%
Power Consumption	12V DC: Max. 7W ; 24V AC: Max. 9W	Max. 6.5W	Max. 6W	Max. 5W
Housing	IP66	IP66 Weather Resistant, IK10 Vandal Resistant	IP66	
IR Range	Up to 150 ft	Up to 120 ft	Up to 150 ft	Up to 60 ft
Communication	Up the coax(need UTC controller) Protocol: Pelco-C(Coaxitron)			OSD (UTC Control) via DVR
Dimensions	3.62" x 3.34" x 10.60"	Ø5.72 x 4.89 in	5.29" x 4.88" x 4.39"	3.53" × 2.33"
Weight	1.98 lbs	3.53 lbs	1.57 lbs	0.88 lb
Mounting Options	IUM-BRJB1, IUMBRCM1*, IUM-BRPM1*	IUM-DRJB2, IUM-DRWM2, IUM-BRCM1*, IUM-BRPM1*	IUM-TRJB1, IUMBRCM1*, IUM-BRPM1*	
Ordering Info:	ULT-C3BXIRM2812: 2.8-12mm	ULT-C3DRXIRM2812: 2.8-12mm	ULT-C3TXIRM2812: 2.8-12mm	ULT-C3TXIR28: 2.8mm

3 Megapixel

True Day/Night

True WDR

UTC Up The Cable Control

OSD

IP66 Weather Resistant

Operates to -40° F

Mounting Options

IUM-BRJB1: Large Bullet Junction Box #1

IUM-BRCM1* Corner Mount #1

IUM-BRPM1* Pole Mount #1

IUM-DRJB2: Large Dome Junction Box #2

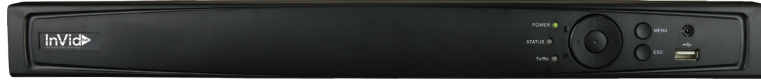IUM-DRWM2: Large Dome Wall Mount #2

IUM-TRJB1: Turret Junction Box #1

Up to 32 TB
Rack mountable
Feature Filled
& More

UD2A-16: Available in 4/8/16 Channels
Cancel out BNC ports and make streaming IP ports (up to 2mp) and support up to 2 bonus IP Channels across the unit

UD3A-32: 32 Channels
Up to 8 bonus IP Channels giving you 40 channels total! Cancel up to 24 BNC ports to make them streaming IP Channels (2MP max)

ULTRA

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ULTRA TVI

Ultra Series TVI Recorders

UD1A-4	UD1A-8	UD1A-16
4 Ch + 1 Bonus IP Ch (Up to 5 Cameras Total)	8 Ch + 2 Bonus IP Ch (Up to 10 Cameras Total)	16 Ch + 2 Bonus IP Ch (Up to 18 Cameras Total)

- Bonus IP Channels
- H.264 / H.264+
- HDMI 1080p with 4K Monitor Support
- Simultaneous HDMI/VGA
- CVBS Main/Spot
- Simultaneous Playback
- Smart Search
- Free App iOS & Android
- FREE CMS
- Free MAC Client

- Bonus IP Channel(s)
- H.264, H.264+ Video Compression
- HDMI up to 4K Resolution
- Simultaneous HDMI/VGA up to 1080p Resolution
- CVBS Main or Spot Monitor
- Simultaneous Playback
- Multiple video search options including

- Smart Search and Sub-Periods for quick retrieval of footage.
- Free iOS & Android Apps for Smart Phones & Tablets
- Free Central Management Software (CMS) to manage multiple units & sites from a single platform
- Free MAC client software

	UD1A-4	UD1A-8	UD1A-16
Intelligent Video Inputs			
Analog HD/SD Inputs	4	8	16
HD Video Resolutions	HD-TVI 720p30(25), 720p60(50), 1080p30(25), HD-AHD 720p30(25), 720p60(50)		
Analog CVBS Video Input	Up to 960x480,720x480(NTSC); 960x576,720x576(PAL)		
Adaptive Ports	Input Format Auto Detection, HD/SD can be mixed in any combination, at any time		
Interface	BNC Connector; 1V p-p, 75Ω		
Privacy masking	4 areas programmable in OSD menu		
Additional Ultra-IP Plug-and-Play Channels (up to 2Mpixel)	1	2	2
Total Cams Supported	5	10	18
Video Output			
Main HDMI & VGA	Full HD 1920×1080/60Hz; SXGA: 1280×1024/60Hz; 720P: 1280×720/60Hz; XGA: 1024×768/60Hz, Up to 4K output		
CVBS Analog BNC	NTSC 704x480 / PAL 704x576; 1V p-p, 75Ω		
Display Modes	1, 2x2, 1+5, 1+7, 3x3, 4x4 split; User Defined Sequence / Alarm Pop-up		
Recording			
Video Compression	Dual Stream: H.264 for Main Stream (H.264+ option for Ultra Cameras with H.264+ option)		
Video Bitrate	32Kb/s~6Mb/s each channel		
Encoding	Main Stream: 1080p (virtual real time to 12FPS max per camera); 720p; WD1; 4CIF; VGA; CIF		
	Sub Stream: WD1, 4CIF (virtual real time); CIF; QVGA; QCIF		
Frame Rate	Main Stream: 1/16 fps ~ Real time frame rate (real time at 720p and lower resolutions)		
Sub Stream: 1/16 fps ~ Real time frame rate	Sub Stream: 1/16 fps ~ Real time frame rate		
Quality	6 levels: Lowest/Lower/Low/Medium/Higher/Highest		
Mode	Continuous; Motion; Alarm; Motion or alarm, Motion + Alarm, None		
Motion Detection & VCA	Configurable per camera for area(s), sensitivity and arming schedule programmable by day of week and hour of day (one channel VCA)		
Schedule Period	Per day in 1 hour blocks; or 8 time periods per day, each with different record mode; plus holidays		
Pre- and Post- Event Recording	Pre-record 0~30 seconds; post record 5s~10 minutes		
Playback			
Synchronous Playback	4 channels	8 channels	16 channels
Playback Resolution	1080p, 720p, WD1, 4CIF, VGA, CIF, QVGA, QCIF		
Search Type	Time/Date; Event (Alarm, Motion, VCA); Manual Tags; Smart Search for motion events from recorded video, sub-periods		
Capacity	Up to record rate		
Playback Controls	Play; Pause; Forward/Reverse; speed control for single~1.8~Vmax (256x); Slide bar with overview of record type and snapshot display from slider position, VCA based accelerated playback between normal play of VCA events		
Digital Zoom During Playback	Supported on Local Displays and CMS + Web		
Event & Alarm			
Event Source	MD (Motion Detection), Video Loss, Video Tampering/Exceptions, Video Content Analysis: Line Crossing with Direction (4 lines); Area Intrusion (4 areas) for one BNC channel.		

Event Action Schedule	Per day in 1 hour blocks; or 8 time periods per day, each with different record mode; plus holidays
Event Action	Buzzer, E-mail, Alarm Full Screen Pop-up, Notify CMS Client
MD Area	User selectable grid pattern 22x15 areas with adjust per cam sensitivity
System Alarm	
Alarm Source	HDD Error, HDD Full, LAN Fail/Address Conflict, Illegal login, Video Signal Exception/, Record/Capture exception
Alarm Action	Buzzer, E-mail, Notify CMS Client (network permitting), Full Screen Monitoring
Audio	
Two-way audio	Audio input pass through to remote web or CMS client; remote audio from web or CMS client pass through to audio output
Input / Output	1ch Input / 1ch Output; RCA, 2V p-p, 1KΩ
Compression	Up to 64Kbps, G.711u
Network	
Interface	10/100/1000 Self-Adaptive Ethernet
Addressing	Static IP, DHCP, xDSL support
NTP/DST	Supported; choice of time zone, NTP server, DST start/end/offset
Protocols Supported	TCP/IP, PPPoE, DHCP, DNS, DDNS, NTP, SMTP, SNMP, NFS, iSCSI, UPnP™, HTTPS, Plug-and-Play (for connected IP Cams), Utility Device Discovery
NAT	uPnP router NAT/port mapping forwards ports automatically (*Router must support/permit uPnP function)
Users	Up to 128 simultaneous connected users
DDNS	Simple DDNS free service tracks WAN IP address and HTTP port
Security	
User IDs	"Admin", plus multiple configurable login IDs
User Levels	All rights for "admin"; Per camera per user rights assignment for Operator and User levels
User Privilege Control	Local and remote access to Live views, audio, recording, playback, menus, PTZ, alarms, copy, logs, upgrade, reboot and camera views
Storage & Clip Copy	
HDD Storage	1 SATA HDD up to 8Tb 1 SATA HDD up to 8Tb 2 SATA HDD up to 8Tb
eSATA	
NAS/SAN	up to 8 network disks (8 NAS disks, or 7 NAS disks +1 IP SAN disk)
Copy Type	Multi-Channel or Single Channel File
Copy Device	USB 2.0 Drive (2 ports)
S.M.A.R.T.	Temperature, duration, error rates, bad sector detection, and more
Serial & I/O	
USB 2.0 Ports	One front, one rear for mouse and data I/O
Serial Port	
RS-485	One; selectable speed and bit pattern; multiple protocols (Pelco P, Pelco D, others)
Keyboard	Input for external control keyboard
Up the Cable Control	Multiple protocols, can be sent out of any BNC port to compatible cameras
User Controls	
Local Controls	Front Panel function and navigation buttons; IR Remote; Mouse
Software	
Web Viewer	Live view, playback and configuration via IE, Firefox, Safari (with free plug-in/extension installed)
User Rights Control	Per user-per camera for multiple functions
Mobile Viewer	iOS and Android supported ; live 16 camera views; 4 camera playback; snapshots from live or play; copy clips/record to smartphone; audio support; PTZ control. HD version of app, optimized for tablets
CMS	Free PC and MAC Clients support multiple device viewing, playback (with digital zoom) and configuration; user rights per camera; E-map support; live view up to 64 cameras in 4:3 and 48 cameras in 16:9; up to 16 cameras in playback
Event Logging	Multiple types: alarm, exception, operation, information; dozens of subtypes within each major type
Firmware Upgrade	From USB or remotely
Backup/Restore Configuration	From USB or remotely
General	

Dimension (W x H x D)	12.4" x 9.5" x 1.8" | 315 × 242 × 45 mm	12.4" x 9.5" x 1.8" | 315 × 242 × 45 mm	15" x 11.4" x 1.9" | 380 × 290 × 48 mm
Chassis Type	Standalone 1U chassis	Standalone 1U chassis	19" Rack-Mountable 1U Chassis (Using optional brackets)
Weight without HDDs	3.3 lb. / 1.5Kg	3.3 lb. / 1.5Kg	4.4 lb. / 2Kg
Operating Temp	14°F~131°F (-10°C~55°C)		
Operating Humidity	10% ~ 90%		
Voltage	12VDC from included power supply, 4 pin DIN; power supply input voltage 100~220 VAC 50~60Hz		
Power	Up to 15W	Up to 20W	Up to 30W
Certifications	FCC, CE, RoHS		
Ordering Info	UD1A-4/2TB UD1A-4/4TB UD1A-4/6TB UD1A-4/8TB	UD1A-8/2TB UD1A-8/4TB UD1A-8/6TB UD1A-8/8TB	UD1A-16/2TB UD1A-16/4TB UD1A-16/8TB UD1A-16/12TB UD1A-16/16TB

Paramont 3 Megapixel IP Cameras

PARAMONT IP
3 Megapixel IP Cameras

Camera	PAR-P3BIR	PAR-P3BIR3312	PAR-P3DRIR	PAR-P3DRIR3312	PAR-P3TXIR
Product Description	3 Megapixel IP Plug & Play Outdoor Mini Fixed IR Bullet	3 Megapixel IP Plug & Play Outdoor Mini IR VF Bullet	3 Megapixel IP Plug & Play Outdoor Fixed IR Dome	3 Megapixel IP Plug & Play Outdoor VF IR Dome	3 Megapixel IP Plug & Play Outdoor Fixed EXIR Turret
Image Sensor	1/3" CMOS				
Image Size	2304 x 1296				
Electronic Shutter	1/25s ~ 1/100000s				
Auto Iris	Fixed Iris				
Min Illumination	0.05 Lux @ F1.2, AGC On; 0 Lux with IR				
Lens (Other lens sizes may be available)	3.6mm @ F1.6, Angle of View: 72°	3.3~12mm @ F1.4 Angle of View: 80° ~38°	3.6mm @ F1.6, Angle of View: 72°	3.3~12mm @ F1.4 Angle of View: 80° ~38°	3.6mm @ F1.6, Angle of View: 72°
Lens Mount	M12	Ø14	M12	Ø14	M12
True Day/Night	ICR				
Wide Dynamic Range	120dB				
BLC & HLC	Yes				
Defogging	Yes				
Digital NR	2D/3D DNR				
Angle Adjustment	Any Angle	Any Angle	Pan: 0°~240°, Tilt: 0°~68°, Rotation: 0°~220°	Pan: 0°~360°, Tilt: 0°~77°, Rotation: 0°~360°	Any Angle
Image					
Video Compression	H.265/H.264/MJPEG				
H.265 Compression Standard	Main Profile @ Level 4.1 High Tier				
Resolution	3 MP (2304 x 1296), 3 MP (2048 x 1536), 1080p (1920x1080), 720p (1280x720), D1, CIF, 480x240				
Main Stream	60Hz/30 FPS: 3 MP, 1080p, 720p	50Hz/25 FPS: 3MP, 1080p, 720p				
Bit Rate	64 Kbps ~ 8 Mbps				
Encode Mode	VBR/CBR				
Quality	Five Levels Under VBR; Freely adjustable under CBR				
Image Settings	ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR: Adjustable through client software or web browser				
Audio Compression	G.711A/U				
ROI	Each ROI to be configured separately				
Interfaces					
Network	RJ45				
Audio	MIC-in x 1	MIC-In x1, MIC-Out x1	MIC-in x 1	MIC-In x1, MIC-Out x1	MIC-in x 1
Video Output	CVBS Video Output (BNC x 1)				
Storage Card	n/a	Support TF Card, Up to 128GB	n/a	Support TF Card, Up to 128GB	n/a
RS485	n/a	Yes	n/a	Yes	n/a
Alarm Input	n/a	1 Channel	n/a	1 Channel	n/a
Alarm Output	n/a	1 Channel	n/a	1 Channel	n/a
Functions					
Remote Monitoring	IE Browsing, CMS Remote Control				
Online Connection	Supports simultaneous monitoring for up to 10-users; Support multi-stream real-time transmission				
Network Protocol	TCP/IP, UDP, DHCP, UPnP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP				
Interface Protocol	ONVIF, GB-T/28181-2011				
Storage	Network Remote Storage	TF Card Local Storage, Network Remote Storage	Network Remote Storage	TF Card Local Storage, Network Remote Storage	Network Remote Storage
Smart Alarm	Motion Alarm	Motion & Sensor Alarm	Motion Alarm	Motion & Sensor Alarm	Motion Alarm
PoE	Yes				
IR Distance	65 Feet	164 Feet	65 Feet	98 Feet	65 Feet
Environmental	IP66 Weather Resistant				
Housing	Standard		IK10 Vandal Resistant		Standard
Other					
Power Supply	DC12V/PoE				
Power Consumption	<2.5W				
IR Consumption	<6.5W	<6.5W	<4W	<5W	<5W
Environmental	-4° ~ 122°F (-20° ~ 50°C), 10-90% Humidity				
Dimensions	Ø 2.51 x 7.2 Inches (64 x 183mm)	Ø 4.29 x 11.18 Inches (109x284mm)	Ø 4.56 x 3.58 Inches (116x91mm)	Ø 5.9 x 4.48 Inches (150x114mm)	Ø 3.42 x 4.25 Inches (87 x 108mm)
Weight	.84 lbs (383g)	2.45 lbs (1115g)	1.33 lbs (605g)	2.27lbs (1030g)	.94lbs (427g)
Mounting Options	IPM-DRPM1*, IPM-DRWM1*, IPM-JB2	IPM-DRPM1*, IPM-DRWM1*, IPM-JB1, IPM-JB2	IPM-DRPM1*, IPM-DRWM1*, IPM-JB1	IPM-DRPM1*, IPM-DRWM1*, IPM-DWM3, IPM-JB3	IPM-DRPM1*, IPM-DRWM1*, IPM-JB2
Ordering Info:	PAR-P3BIR36: 3.6mm	PAR-P3BIR3312: 3.3-12mm	PAR-P3DRIR28: 2.8mm PAR-P3DRIR36: 3.6mm	PAR-P3DRIR3312: 3.3-12mm	PAR-P3TXIR36: 3.6mm

Feature list (right column):
- 3 Megapixel Plug & Play
- H.265
- True Day/Night
- True WDR
- CVBS Output
- IP66 Weather Resistant
- PoE/DC12V
- FREE CMS
- Free App iOS & Android
- Free MAC Client Through NVR
- ONVIF

Mounting Options

IPM-JB1 Junction Box #1

IPM-JB2 Junction Box #2

IPM-JB3 Junction Box #3

IPM-DRPM1 Pendant Mount #1 Must be used with IPM-JB2

IPM-DRWM1: Wall Mount #1 Must be used with IPM-JB2

IPM-DRWM3 Wall Mount #3

3 MEGAPIXEL PLUG & PLAY

*Must be used in conjunction with appropriate mount/junction box
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Paramont 4 Megapixel IP Cameras

PARAMONT IP
4 Megapixel IP Cameras

Camera	PAR-P4BIRA3312	PAR-P4DRIR	PAR-P4DRIRA3312	PAR-P4TXIR	PAR-P4TXIRA3312	PAR-P4RICS
Image Sensor	1/3" CMOS					
Image Size	2688 x 1520					
Electronic Shutter	1/25s ~ 1/100000s					
Auto Iris	Fixed Iris					DC Drive
Min Illumination	0.05 Lux @ F1.2, AGC On; 0 Lux with IR					Color: 0.05 Lux @ F1.2, AGC On; B/W: 0.01 Lux @ F1.2, AGC On
Lens (Other lens sizes may be available)	3.3-12mm @ F1.4, Angle of View: 80° ~ 38°	3.6mm @ F1.6, Angle of View: 72°	3.3-12mm @ F1.4, Angle of View: 80° ~ 38°	3.6mm @ F1.6, Angle of View: 72°	3.3-12mm @ F1.4, Angle of View: 80° ~ 38°	Non-Standard
Lens Mount	Ø14	M12	Ø14	M12	Ø14	C/CS
True Day/Night	ICR					
Wide Dynamic Range	120dB					
BLC & HLC	Yes					
Defogging	Yes					
Digital NR	2D/3D DNR					
Angle Adjustment	Any Angle	Pan: 0°~240°, Tilt: 0°~68°, Rotation: 0°~220°	Pan: 0°~360°, Tilt: 0°~77°, Rotation: 0°~360°	Any Angle	Pan: 0°~360°, Tilt: 0°~90°, Rotation: 0°~360°	n/a
Image						
Video Compression	H.265/H.264/MJPEG					
H.265 Compression Standard	Main Profile @ Level 4.1 High Tier					
Resolution	4 MP (2592 x 1520), 2K (2560 x 1440), 3 MP (2304 x 1296), 1080p (1920x1080), 720p (1280x720), D1, CIF, 480x240					
Main Stream	60Hz/30 FPS: 4MP, 2K, 3 MP, 1080p, 720p	50Hz/25 FPS: 4MP, 2K, 3MP, 1080p, 720p				
Bit Rate	64Kbps ~ 10Mbps					
Encode Mode	VBR/CBR					
Quality	Five Levels Under VBR; Freely adjustable under CBR					
Image Settings	ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR: Adjustable through client software or web browser					
Audio Compression	G.711A/U					
ROI	Each ROI to be configured separately					
Interfaces						
Network	RJ45					
Audio	MIC-in x 1, MIC-out x 1	MIC-in x 1	MIC-in x 1, MIC-out x 1	MIC-in x 1	MIC-in x 1	MIC-in x 1, MIC-out x 1
Video Output	CVBS Video Output (BNC x 1)					
Storage Card	Support TF Card, Up to 128GB	n/a	Support TF Card, Up to 128GB	n/a		Supports SD Card, Up to 128 GB
RS485	Yes	n/a	Yes	n/a		Yes
Alarm Input	1 Channel	n/a	1 Channel	n/a		1 Channel
Alarm Output	1 Channel	n/a	1 Channel	n/a		1 Channel
Functions						
Remote Monitoring	IE Browsing, CMS Remote Control					
Online Connection	Supports simultaneous monitoring for up to 10-users; Support multi-stream real-time transmission					
Network Protocol	TCP/IP, UDP, DHCP, UPnP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP					
Interface Protocol	ONVIF, GB-T/28181-2011					
Storage	TF Card Local Storage, Network Remote Storage	Network Remote Storage	TF Card Local Storage, Network Remote Storage	Network Remote Storage	Network Remote Storage	SD Card Local Storage, Network Remote Storage
Smart Alarm	Motion Alarm, Sensor Alarm	Motion Alarm	Motion Alarm, Sensor Alarm	Motion Alarm	Motion Alarm	Motion Alarm, Sensor Alarm
PoE	Yes					
IR Distance	164 Feet	65 Feet	98 Feet	65 Feet	98 Feet	
Environmental	IP66 Weather Resistant					
Housing	Standard	IK10 Vandal Resistant		Standard	Standard	Standard
Other						
Power Supply	DC12V/PoE					
AC Input	n/a					AC24V Optional
Power Consumption	<2.5W					
IR Consumption	<6.5W	<4W	<5W	<5W	<5.5W	n/a
Environment	-4° ~ 122°F (-20° ~ 50°C), 10-90% Humidity					
Dimensions	Ø 4.29 x 11.18 Inches (109x284mm)	Ø 4.56 x 3.58 Inches (116x91mm)	Ø 5.9 x 4.48 Inches (150x114mm)	Ø 3.42 x 4.25 Inches (87 x 108mm)	Ø 4.29 x 5.11 Inches (109x130mm)	2.75 x 5.70 x 2.36 in (70 x 145 x 60mm)
Weight	2.45 lbs (1115g)	1.33 lbs (605g)	2.27lbs (1030g)	.94lbs (427g)	1.51 lbs (689g)	0.88 lbs (400g)
Mount	IPM-DRPM1*, IPM-DRWM1*, IPM-JB1, IPM-JB2	IPM-DRPM1*, IPM-DRWM1*, IPM-JB1	IPM-DRPM1*, IPM-DRWM1*, IPM-DWM3, IPM-JB3	IPM-DRPM1*, IPM-DRWM1*, IPM-JB2		n/a
Ordering Info	PAR-P4BIRA3312: 3.3-12mm	PAR-P4DRIR28: 2.8mm PAR-P4DRIR36: 3.6mm	PAR-P4DRIRA3312: 3.3-12mm	PAR-P4TXIR: 3.6mm	PAR-P4TXIRA3312: 3.3-12mm	PAR-P4RICS: (lens not included)

Feature badges:
- 4 Megapixel Plug & Play
- H.265
- True Day/Night
- True WDR
- CVBS Output
- IP66* Weather Resistant
- PoE/DC12V*
- FREE CMS
- Free App iOS & Android
- Free MAC Client Through NVR
- ONVIF

*Box camera must be in proper housing to be weather resistant and also has a 24V option.

Mounting Options

- IPM-JB1 Junction Box #1
- IPM-JB2 Junction Box #2
- IPM-JB3 Junction Box #3
- IPM-DRPM1 Pendant Mount #1 Must be used with IPM-JB2
- IPM-DRWM1: Wall Mount #1 Must be used with IPM-JB2
- IPM-DRWM3 Wall Mount #3

4 MEGAPIXEL PLUG & PLAY

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*Must be used in conjunction with appropriate mount/junction box

8

![InVid Tech - Innovative Video Technology]

Paramont NVRs

PN1A-4X4 /PN1A-8X8

PN1A-32X16

PARAMONT IP

Plug & Play	5 Megapixel	ONVIF
HDMI 1080p with 4K Monitor Support	VGA Main Monitor	P2P Connectivity
Thumbnail Search	H. 265	FREE CMS
Free MAC Client	Free App iOS & Android	

Standard Features

- Plug & Play Ports for easy camera setup PoE (Power Over Ethernet) available on all ports
- Up to 5 Megapixel Resolution Recording
- Simultaneous playback
- Works with ONVIF or other supported IP cameras
- Local HDMI main monitor output with 4K Support
- Local VGA main monitor output up to 1080p
- True P2P Connectivity with QR Code Connect

- Multiple video search options including Thumbnail Search for quick retrieval of footage.
- H.265 video compression
- Free iOS & Android Apps for Smart Phones & Tablets
- Free Central Management Software (CMS) to manage multiple units & sites from a single platform
- Free MAC client software

	PN1A-4X4	PN1A-8X8	PN1A-32X16
Streaming Video Inputs & Recording			
Maximum Number of IP Cameras	4	8	32
Number of built in PnP/PoE Switch Ports	4	8	16
Supported Live View/ Record Resolutions	Up to 5MP Support		
Sub-stream	Supported for Live View/Playback		
Audio streaming	Supported from audio capable cameras		
Maximum FPS rate per camera (Live and Record)	30FPS Main stream; 30FPS Sub-stream Up to 120FPS total for 4 cameras	30FPS Main stream; 30FPS Sub-stream Up to 240FPS total for 8 cameras	30FPS Main stream; 30FPS Sub-stream Up to 960FPS total for 32 cameras
Maximum Record Streaming Video Input Bandwidth (all cameras combined)	40 Mb/s	64 Mb/s	256 Mb/s
Recording Compression	H.265/H.264 for main and sub streams		
Recording Modes	Continuous, Motion, Alarm, Motion+Sensor, Continuous+ Motion, Continuous+Sensor, Continuous+Motion+Sensor		
Motion	Camera Side, configurable from NVR for compatible series cameras		
Schedule Period	Per day; or 25 time periods per day		
Pre- and Post- Event Recording	Pre-record 3~5 seconds; post record 5s~10 minutes		
Hands free Plug and Play' Cameras Fully Supported	Any Paramont-IP models		
Third Party Cameras Supported (requires traditional configuration and setup)	Onvif		
Local Live Presentation of Streaming Video/Audio			
Local Display Main Monitor Outputs	HDMI 60Hz: 4K (3840x2160) HDMI & VGA 60Hz: 1920×1080, 1280×1024		
Camera Display Layouts	1, 2x2	1, 2x2, 1+5, 1+7, 3x3	1, 2x2, 1+5, 1+7, 3x3, 4x4, 1x13, 5x5, 32, 6x6
Automatic Stream Selection	Single camera view and 2x2 at main stream resolution; Automatic switching to sub-stream resolution in other multi-view displays to conserve CPU capacity and maintain parity between per-camera screen area and image size		
Audio Output	1-ch Line Level, RCA (Linear, 1KΩ) (requires audio equipped cameras)		

Playback of Recorded Video/Audio			
Supported Playback Resolutions	Up to 5MP		
Nominal Local Playback Capability	4 Ch. Sub-Stream ,1 ch @ 5mp	4/9 Ch. Sub-Stream ,1 ch @ 5mp	4/9/16 Ch. Sub-Stream ,1 ch @ 5mp
Playback search modes	Time/Date; Thumbnail Search, Event Search(Manual, Sensor, Motion)		
Playback Controls	Play; Pause; Forward/Reverse; speed control for single~1/32~32x		
Digital Zoom During Playback	Supported on Local Displays, Web Browser and CMS		
Local Hard Drives and Other Storage			
Number of Internal Hard Drives	1 SATA HDD; up to 6TB	Up to 1 SATA HDD; up to 6TB	Up to 8 SATA HDD; up to 6TB each for 48TB maximum
S.M.A.R.T	With extensive statistics, alarms, on demand tests and reporting		
Record to	HDD	HDD	HDD/eSata (one 6TB drive max.)
Archive to	USB	USB	USB/eSata (one 6TB drive max.)
Local Plug and Play Camera Network Support			
Integral PoE Switch	4 ports 10 Mb/s	8 ports 10 Mb/s	16 Ports 10 Mb/s
Camera Network Security			
PoE Type	802.3at 19W max per port		
Total Power Budget	50W all ports	100W all ports	150W all ports
Remote Viewing and Local/Remote Configuration			
Built in Web Server Interface	Live view, playback & config via IE, Firefox, Safari (with free plug-in/extension installed)		
CMS	PC and MAC Client supports multiple device viewing, playback (with digital zoom) and configuration; user rights per camera; E-map support; live view up to 1000 cameras; up to 16 cameras in playback		
Mobile Apps	iOS and Android supported up to 16; 4 camera playback; snapshots from live or play; copy clips/record to smartphone; audio support; PTZ control.		
User Rights Control	Per user-per camera for multiple functions		
Event Logging	Multiple types: alarm, exception, operation, settings		
Firmware Upgrade	From USB		
Backup/Restore Configuration	For NVR settings and for IP Camera settings; from USB or remotely		
Network and Other Interfaces			
LAN/WAN Network Port	10M/100M adaptive Ethernet Interface	10M/100M adaptive Ethernet Interface	10M/100M/1000M adaptive Ethernet Interface
Connection of non-PnP IP cameras	Supported		
Remote Monitoring Output Maximum Bandwidth	40Mb/s	50Mb/s	256Mb/s
Maximum number of remote connections	10		
DST/NTP	Supported; choice of time zone, NTP server, DST start/end/offset		
Port Mapping/uPnP	Automatic port forwarding/redirection using uPnP (routers must support this capability)		
Serial Interfaces	1xRS-485		
USB Interfaces	USB2.0 Front and Rear	USB2.0 Front and Rear	1 USB2.0 Front; 1 USB 3.0 Rear
Audio Input	1 RCA (2VP-P, 1KΩ)		
Alarm Inputs	n/a	n/a	16
Alarm Outputs	n/a	n/a	4
General Mechanical and Environmental			
Power Input	48VDC from included external power supply	48VDC from included external power supply	100~240VAC,USA Power Cord
Operating Temperature	14°F ~ 122°F (-10°C ~ +50°C)		
Operating Humidity Range	10% ~ 90%		
Size	11.81 x 10.62 x 2.16 Inches (300 x 270 x 55mm)	11.81 x 10.62 x 2.16 Inches (300 x 270 x 55mm)	16.92 x 17.71 x 3.54 Inches (430 x 450 x 90mm)
Weight (without hard drives or ODD)	3.3lb (1.5Kg) NVR only allow ~1.4 lb. per HDD	4.4lb (2Kg) NVR only allow ~1.4 lb. per HDD	8.8 lb./4 Kg allow ~1.4 lb. per HDD
Certifications	FCC, CE		

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Ultra 4 Megapixel IP Cameras

ULTRA IP

Camera	ULT-P4DRIR	ULT-P4DRIRA	ULT-P4DRIRWA	ULT-P4DRIRM2812	ULT-P4LIR	ULT-P4LIRW28
Image Sensor	1/2.8" progressive scan CMOS			1/3" progressive scan CMOS	1/3" progressive scan CMOS	
Min. illumination	0.01 lux @ (F1.2, AGC ON), 0 lux with IR					
Shutter time	1/30s ~ 1/100,000s					
Lens	4mm @ F2.0, angle of view: 75.8° (2.8mm, 6mm, 12mm optional)	2.8mm @ F2.0, angle of view: 75.8°	2.8mm @ F2.0, angle of view: 75.8°	2.8 ~ 12mm @ F1.4, Angle of view: 98° ~ 30.5°	2.8mm @ F2.0 (4mm optional)	2.8mm @ F2.0
Angle adjustment	Pan: -90° ~ 90°, tilt 0° ~ 75°			Pan: 0° ~ 355°, tilt 0° ~ 75°	n/a	
Digital noise reduction	3D DNR					
Wide dynamic range	True WDR 120db					
Day & night	IR cut filter with auto switch					
Video compression	H.264 / MJPEG / H.264+					
Alarm		1/1			1/1	
Audio		1/1			1/1, Built-in Mic	
Dual stream	Yes					
Max. image resolution	4 MP CMOS, 2688×1520					
Frame rate	20fps (2688×1520), 30fps (1920×1080)					
Image settings	Saturation, brightness, contrast, sharpness adjustable through client software or web browser					
Network Storage	NAS					
BLC	Yes, zone configurable					
On Board Storage	Micro SD slot, up to 128GB					
Alarm trigger	Motion detection, tampering alarm			Motion detection, tampering alarm, network disconnect, IP address conflict, storage exception, storage error		
Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, SNMP, HTTPS, FTP, 802.1x, Qos					
Interoperability	ONVIF, PSIA, CGI					
Security	User Authentication, reset button, flickerless, dual stream, heartbeat, mirror, watermark					
General functionalities	User authentication, watermark					
Communication interface	1 RJ45 10M/ 100 M Ethernet interface					
Operating conditions	14°F ~ 104°F (-10°C ~ 40°C)			-22 °F ~ 140 °F (-30 °C ~ 60 °C)		
Humidity	humidity 95% or less (non-condensing)					
Power supply	12 VDC +/- 10%, PoE (802.3af)					
Power consumption	Max, 5W					
Ratings	IP66 / IK10			IP66		
IR range	Up to 100ft			Up to 60ft	Up to 33ft	Up to 33ft
Dimensions	Ø 4.4" x 3.2"			Ø 5.51" x 3.94"	3.93" × 3.84" × 2.1"	
Weight	1.1 lbs (500g)			2.2lbs (1000g)	0.55 lbs (250g)	0.55 lbs (250g)
Mounting Options	IUM-DRJB1, IUM-DRWM1, IUM-BRCM1*, IUM-BRPM1*			IUM-DRJB2, IUM-DRWM2, IUM-BRCM1*, IUM-BRPM1*	IUM-LRWM1, IUM-LRPM1, IUM-BRCM1*, IUM-BRPM1*	
Ordering Info	ULT-P4DRIR28: 2.8mm ULT-P4DRIR4: 4mm ULT-P4DRIR6: 6mm	ULT-P4DRIRA28: 2.8mm	ULT-P4DRIRWA28: 2.8mm	ULT-P4DRIRM2812	ULT-P4LIR28: 2.8mm, ULT-P4LIR4: 4mm	ULT-P4LIRW28: 2.8mm

Features (right sidebar):
- 4 Megapixel Plug & Play
- H.264 / H.264+
- True Day/Night
- True WDR
- IP66 Weather Resistant
- PoE/DC12V
- FREE CMS
- Free App iOS & Android
- Free MAC Client Through NVR
- ONVIF

Mounting Options
- IUM-BRCM1* Corner Mount #1
- IUM-BRPM1* Pole Mount #1
- IUM-DRJB1: Small Dome Junction Box #1
- IUM-DRJB2: Large Dome Junction Box #2
- IUM-DRWM1: Small Dome Wall Mount #1
- IUM-DRWM2: Large Dome Wall Mount #2
- IUM-LRWM1: Wall Mount (not shown)
- IUM-LRPM1: Pendant Mount (not shown)

3, 5, 6, 8 & 12 Megapixel Ultra IP Cameras Also Available!

4 MEGAPIXEL PLUG & PLAY

Ultra IP PTZs
View Page 4 or www.invidtech.com for some PTZ Mounting Options

ULT-P2PTZIR20: 2 Megapixel IP PTZ, 20x Zoom, 300' IR Distance, SD Card Slot, AC24V

ULT-P2PTZIR30: 2 Megapixel IP PTZ, 30x Zoom, 300' IR Distance, SD Card Slot, AC24V

ULT-P2PTZXIRT30 2 Megapixel IP PTZ with Auto-Tracking, 30x Zoom, 300' Smart IR Distance, SD Card Slot, AC24V

ULT-P2PTZ20 2 Megapixel IP Mini PTZ, 20x Zoom, SD Card Slot, PoE+/PoE/AC24V

ULT-P2PTZR20 2 Megapixel Recessed IP PTZ 20x Zoom, SD Card Slot, AC24V

ULT-P2PTZXIR20: 2 Megapixel IP PTZ, 20x Zoom, 328' XIR Distance, SD Card Slot, AC24V

ULT-P3PTZXIR30: 3 Megapixel IP PTZ, 30x Zoom, 300' IR Distance, SD Card Slot, AC24V

ULT-P3PTZXIRT36 3 Megapixel IP PTZ with Auto-Tracking, 36x Zoom, 600' IR Distance, SD Card Slot, AC24V/High-PoE

Paramont IP PTZ
PAR-P3PTZXIR20 3 Megapixel IP PTZ, 20x Zoom, 328' IR Range, SD Card Slot, AC24V, Wall Mount & Power Supply Included

PARAMONT IP

![InVid Tech - Innovative Video Technology]

Ultra 4 Megapixel IP Cameras

ULTRA IP

Camera	ULT-P4BIR	ULT-P4BIR2812	ULT-P4BXIR	ULT-P4BIRM2812	ULT-P4TXIR	ULT-P4PAN
Image Sensor	1/3" progressive scan CMOS				1/2.8" progressive scan CMOS	1/3" progressive scan CMOS
Min. illumination	0.01 lux @ (F1.2, AGC ON), 0 lux with IR					
Shutter time	1/30s ~ 1/100,000s					
Lens	4mm @ F2.0 (6mm optional) Angle of view: 75.8°	2.8 – 12mm @ F1.4	4mm @ F2.0 (6mm, 12mm optional) Angle of view: 75.8°	2.8 – 12mm @ F1.4	4mm @ F2.0, angle of view: 75.8° (2.8mm, 6mm, optional)	1.6 mm @ F1.6
Digital noise reduction	3D DNR					
Wide dynamic range	True WDR 120db					n/a
Day & night	IR cut filter with auto switch					
Video compression	H.264 / MJPEG / H.264+					H.264 / MJPEG
Alarm	n/a	1/1	n/a	1/1	n/a	n/a
Audio	n/a	1/1	n/a	1/1	n/a	n/a
Dual stream	Yes				Yes	
Max. image resolution	4 MP CMOS, 2688×1520				2560 x 1440	
Frame rate	20fps (2688×1520), 30fps (1920×1080)				15fps (4 MP/2560×1440), 30fps (2MP/1920×1080)	
Image settings	Saturation, brightness, contrast, sharpness adjustable through client software or web browser				n/a	
Network Storage	NAS				n/a	
BLC	Yes, zone configurable					
On Board Storage	n/a				Micro SD slot, up to 64 GB	
Alarm trigger	Motion detection, tampering alarm					
Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, SNMP, HTTPS, FTP, 802.1x, Qos					
Interoperability	ONVIF, PSIA, CGI					
Security	User Authentication, reset button, flickerless, dual stream, heartbeat, mirror, watermark					
General functionalities	User authentication, watermark					
Communication interface	1 RJ45 10M/ 100 M Ethernet interface					
Operating temp	-22 °F ~ 140 °F				14°F ~ 104°F	
Humidity	humidity 95% or less (non-condensing)				humidity 90% or less (non-condensing)	
Power supply	12 VDC +/- 10%, PoE (802.3af)					
Power consumption	Max, 5W	Max, 7.5W			Max, 5.5W (7W with ICR on)	Max, 5.55W
Ratings	IP66				IP66	Indoor
IR range	UP to 100ft	UP to 100ft	UP to 150ft	UP to 100ft	up to 100ft	n/a
Dimensions	2.4" x 3" x 5.5"	3.74" x 4.13" x 10.18"	11.8" x 3.4" x 3.35"	3.74" x 4.13" x 10.18"	Ø 5.0" x 3.8"	Ø4.7"x1.6"
Weight	0.66lbs (300g)	1.5lbs (700g)	1.5lbs (700g)	1.5lbs (700g)	1.5 lbs (670g)	1.32lbs (600g)
Mounting Options	n/a	IUM-BRJB1, IUMBRCM1*, IUM-BRPM1*			IUM-TRJB, IUM-TRWM1, IUM-BRCM1*, IUM-BRPM1*	
Ordering Info	ULT-P4BIR4: 4mm	ULT-P4BIR2812: 2.8-12mm	ULT-P4BXIR4: 4mm	ULT-P4BIRM2812: 2.8-12mm	ULT-P4TXIR28: 2.8mm ULT-P4TXIR4: 4mm	ULT-P4PAN: 1.6mm

Feature highlights (sidebar)
- 4 Megapixel Plug & Play
- H.264 / H.264+
- True Day/Night
- True WDR
- IP66 ** Weather Resistant
- PoE/DC12V
- FREE CMS
- Free App iOS & Android
- Free MAC Client Through NVR
- ONVIF

**Except Indoor Cameras

Mounting Options
- IUM-BRJB1: Large Bullet Junction Box #1
- IUM-BRCM1* Corner Mount #1
- IUM-BRPM1* Pole Mount #1
- IUM-TRJB: Small Turret Junction Box
- IUM-TRWM1: Turret Camera Wall Mount #1

3, 5, 6, 8 & 12 Megapixel Ultra IP Cameras Also Available!

4 MEGAPIXEL PLUG & PLAY

ULT-P2LPR300
2 Megapixel IP License Plate Camera, 8-32mm, WDR, 300' EXIR Range, PoE/12VDC, SD Card Slot, Captures License Plates with Vehicles going up to 100MPH

ULT-P2LPR150
2 Megapixel IP Plug & Play Mini Bullet, 2.8-12mm, 150' IR Range, PoE/DC12V, SD Card Slot, Captures License Plates with Vehicles going up to 100MPH

ULT-P6PAN
6 Megapixel Outdoor Vandal IP Plug & Play, Panoramic Camera, 1.27mm Lens, PoE/DC12V, SD Card Slot

6 MEGAPIXEL PLUG & PLAY

Ultra IP Minatures

ULT-P2SQPOE36
2 Megapixel/1080p IP Miniature Square Camera
Sony Exmor 2.07MP Image Sensor, Triple Codec (H.264/MPEG4/MJPEG), Triple Stream, D-WDR, Supports Onvif, PoE

ULT-P2SQPOEP43
2 Megapixel/1080p IP Miniature Square Camera
Sony Exmor 2.07MP Image Sensor, Triple Codec (H.264/MPEG4/MJPEG), Triple Stream, D-WDR, Supports Onvif, PoE

ULTRA IP

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Ultra Series NVR

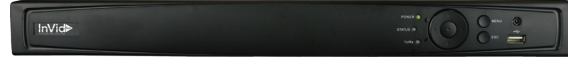| 12 Megapixel	HDMI 1080p Main Monitor	CVBS Output*	Smart Search/ Sub Periods	ONVIF	Virtual Host
Free App iOS & Android	FREE CMS	Free MAC Client			

UN1A-4X4

UN1A-16X16

UN1A-8X8

UN1A-16X16L, UN1A-32X16

ULTRA

Standard Features

- Up to 12 Megapixel Resolution Recording
- Local HDMI & VGA main monitor output up to 1080p (4K Support on 16X16L/32X16)
- CVBS Call Monitor Output (16X16L/32X16)
- Multiple video search options including Smart and Sub-Period Search for quick retrieval of footage.
- Works with ONVIF or other supported IP cameras
- Unique Virtual Host provides remote access to all IPC login menu based features and capabilities
- Free iOS & Android Apps for Smart Phones & Tablets
- Free Central Management Software (CMS) to manage multiple units & sites from a single platform
- Free MAC client software to easily manage your system from your Apple computer

*16X16L/32X16

	UN1A-4X4	UN1A-8X8	UN1A-16X16	UN1A-16X16L	UN1A-32X16
Streaming Video Inputs & Recording					
Maximum Number of IP Cameras	4	8	16		32
Number of built in PnP/PoE Switch Ports	4	8	16		
Supported Live View/ Record Resolutions	Up to 12MP Support				
Sub-stream	Supported for recording, playback and live viewing				
Audio streaming	Supported from audio capable cameras				
Maximum FPS rate per camera (Live and Record)	30FPS Main stream; 30FPS Sub-stream Up to 120FPS total for 4 cameras	30FPS Main stream; 30FPS Sub-stream Up to 240FPS total for 8 cameras	30FPS Main stream; 30FPS Sub-stream Up to 480FPS total for 16 cameras	30FPS Main stream; 30FPS Sub-stream Up to 480FPS total for 16 cameras	30FPS Main stream; 30FPS Sub-stream Up to 960FPS total for 32 cameras
Maximum Record Streaming Video Input Bandwidth (all cameras combined)	40 Mb/s	80 Mb/s	160 Mb/s	256 Mb/s	
Recording Compression	H.264 for main stream, MJPEG for sub-stream, H.264+ (w/supported cameras)			H.264/H.265 for main stream, MJPEG for sub-stream, H.264+ (w/supported cameras)	
Recording Modes	Continuous, Motion, Alarm, Motion+Alarm, Motion or Alarm, Event, None				
Motion & VCA Detection	Camera Side, configurable from NVR for compatible series cameras				
Schedule Period	Per day in 1 hour blocks; or 8 time periods per day, each with different record mode; plus holidays				
Pre- and Post- Event Recording	Pre-record 0~30 seconds; post record 5s~10 minutes				
Hands free Plug and Play' Cameras Fully Supported	Any Ultra-IP models (IPCAM protocol)				
Third Party Cameras Supported (requires traditional configuration and setup)	Onvif; Acti, Arecont, Axis, Bosch, Brickcom, Canon, Hikvision, Hunt, Panasonic, Pelco, PSIA, Samsung, Sanyo, Sony, Vivotek, Zavio				
Local Live Presentation of Streaming Video/Audio					
Local Display Main Monitor Outputs	HDMI & VGA 60Hz: 1920×1080, 1280×1024, 1280×720, 1024×768			HDMI 60Hz: 4K (3840x2160), 2K (2560x1440), 1920×1080, 1600×1200, 1280×1024, 1280×720, 1024×768	
				VGA 60Hz: 1920×1080P, 1280×1024, 1280×720, 1024×768	
Camera Display Layouts	1, 2x2	1, 2x2, 1+5, 1+7, 3x3	1, 2x2, 1+5, 1+7, 3x3, 4x4	1, 2x2, 1+5, 1+7, 3x3, 4x4	1, 2x2, 1+5, 1+7, 3x3, 4x4, 5x5, 32, 6x6
Automatic Stream Selection	Single camera view and 2x2 at main stream resolution; Automatic switching to sub-stream resolution in other multi-view displays to conserve CPU capacity and maintain parity between per-camera screen area and image size				
Audio Output (requires audio equipped cameras)	1-ch Line Level, RCA (Linear, 1KΩ) HDMI audio on HDMI monitor output (requires audio equipped cameras)				
Playback of Recorded Video/Audio					
Supported Playback Resolutions	Up to 12MP				
Nominal Local Playback Capability	4 channels 1080p, 1 ch @ 12mp	8 channels 720p; 6 channels 1080p, 1 Ch @ 12MP	16 channels 4CIF; 12 channels 720p; 6 Channels 1080p, 1 Ch @ 12MP	4 channels @ 4K; 16 channels @ 1920x1080, Reduced total bandwidth permits greater number of cameras to be played.	
	(actual playback depends on decoding load which varies based on settings for recorded video bandwidth restrictions, resolution, image quality, FPS rate, compression efficiency, and complexity of pixel change in the scene)				

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Ultra Series NVR Continued

	UN1A-4X4	UN1A-8X8	UN1A-16X16	UN1A-16X16L	UN1A-32X16
Playback search modes	Time/Date; Manual Tags; Smart Search, Event Search(Motion/Alarm/VCA) and Sub-Periods				
Playback Controls	Play; Pause; Forward/Reverse; speed control for single~1.8~xMax (256x), Slide bar with overview of record type and snapshot display from slider position				
Digital Zoom During Playback	Supported on Local Displays, Web Browser and CMS				
Local Hard Drives and Other Storage					
Number of Internal Hard Drives	1 SATA HDD; up to 8TB	Up to 2 SATA HDD; up to 8TB each for 16TB maximum	Up to 2 SATA HDD; up to 8TB each for 16TB maximum	Up to 4 SATA HDD; up to 8TB each for 32TB maximum	Up to 4 SATA HDD; up to 8TB each for 32TB maximum
Redundant Recording	n/a	Yes			
S.M.A.R.T	With extensive statistics, alarms, on demand tests and reporting				
Record to	HDD, NAS or SAN			HDD, NAS/SAN, eSATA	
Archive to	USB			USB or eSATA	
Local Plug and Play Camera Network Support					
Integral PoE Switch	4 ports 10/100 Mb/s	8 ports 10/100 Mb/s	16 Ports 10/100 Mb/s		
Camera Network Security	Option to enable pass thru access from LAN/WAN to cameras or to isolate camera network from LAN/WAN for increased security				
PoE Type	802.3at 30W max per port				
Total Power Budget	50W all ports	120W all ports	200W all ports		
PnP Network Support	Integral DHCP function with address-per-port initial assignment Internal bridge can forward connections from LAN/WAN network port to individual IPC for remote access to IPC OSD detail config menus (Using InVid Tech Ultra-IP Series cameras connected to internal PnP PoE switch ports)				
Remote Viewing and Local/Remote Configuration					
Built in Web Server Interface	Live view, playback & config via IE, Firefox, Safari (with free plug-in/extension installed)				
CMS	PC and MAC Client supports multiple device viewing, playback (with digital zoom) and configuration; user rights per camera; E-map support; live view up to 64 cameras in 4:3 and 48 cameras in 16:9; up to 4 cameras in playback				
Mobile Apps	iOS and Android supported up to 16; 4 camera playback; snapshots from live or play; copy clips/record to smartphone; audio support; PTZ control.				
User Rights Control	Per user-per camera for multiple functions				
Event Logging	Multiple types: alarm, exception, operation, information; dozens of sub-types within each major type				
Firmware Upgrade	From USB or remotely				
Backup/Restore Configuration	For NVR settings and for IP Camera settings; from USB or remotely				
Network and Other Interfaces					
LAN/WAN Network Port	10M/100M/1000M adaptive Ethernet Interface				
Connection of non-PnP IP cameras	Supported				
Remote Monitoring Output Maximum Bandwidth	80Mb/s	80Mb/s	80Mb/s	256Mb/s	
Maximum number of remote connections	32	128			
DST/NTP	Supported; choice of time zone, NTP server, DST start/end/offset				
Port Mapping/uPnP	Automatic port forwarding/redirection using uPnP (routers must support this capability)				
Serial Interfaces	1xRS-485	1xRS-485	1xRS-485	1xRS-232 DB9; 1xRS-485; 1xKeyboard controller input	1xRS-232 DB9; 1xRS-485; 1xKeyboard controller input
USB Interfaces	1 USB2.0 front; 1 USB 3.0 rear	1 USB2.0 front; 1 USB 3.0 rear	1 USB2.0 front; 1 USB 3.0 rear	2 USB2.0 front; 1 USB 3.0 rear	2 USB2.0 front; 1 USB 3.0 rear
Audio Input	1 RCA (2VP-P, 1KΩ)				
Alarm Inputs	n/a			16	16
Alarm Outputs	n/a			4 single pole	4 single pole
General Mechanical and Environmental					
Power Input	12VDC from included external power supply	100~240VAC, 47~63Hz	100~240VAC, 47~63Hz	100~240VAC, up to 300W max. continuous/450W peak, 50~60Hz; USA Power Cord	
Continuous Power Consumption	67W including PoE	145W including PoE	200W including PoE	Up to 40W for NVR; up to 200W for PoE	Up to 45W for NVR; up to 200W for PoE
Operating Temperature	14°F ~ 131°F (-10°C ~ +55°C)				
Operating Humidity Range	10% ~ 90%				
Cooling Fan	1	2	2	1, in power supply	1, in power supply
Size	12.4" x 9.1" x 1.8" (315 x 230 x 45mm)	17.52" x 11.42" x 1.8" Rack Mountable with optional brackets	15.0" x 11.42" x 1.9"	1.5U Rack mountable chassis (rack ears provided) 17.52" x 15.35" x 2.76"	
Weight (without hard drives or ODD)	3.3lb (1.5Kg) NVR only allow ~1.4 lb. per HDD	4.4lb (2Kg) NVR only allow ~1.4 lb. per HDD	4.4lb (2Kg) NVR only allow ~1.4 lb. per HDD	8.8 lb./4 Kg allow ~1.4 lb. per HDD	8.8 lb./4 Kg allow ~1.4 lb. per HDD
Certifications	FCC, CE, RoHS				

High Definition Monitors

Model	IMHD-17	IMHD-1943	IMHD-19	IMHD-20	IMHD-22	IMHD-24	IMHD-27
Screen Size	17"	19"	18.5" Diagonal	19.53" diagonal	21.5" Diagonal	24"	27" Diagonal
Resolution	1280 x 1024 @60Hz	1280 x 1024 @ 60Hz	1366 x 768 @60Hz (1080p inputs scaled to 720p)	1920x1080	1920 x 1080 @60Hz	1920 x 1080 @60Hz	1920 x 1080 @60Hz
Brightness	250cd/m2						300cd/m2
Contrast Ratio	1000:1						
Aspect Ratio	5:04			16:09			
Viewing Angle	170° / 160° (H/V)						
Pixel Pitch	0.264 x 0.264mm	0.294mm x 0.294mm	0.300mm x 0.300mm	0.2265 x 0.2265mm	0.248mm x 0.248mm	0.2715 x 0.2715mm	0.311mm x 0.311mm
Display Colors	16.7 Million						
Response Time	<5ms						
Video System	NTSC / PAL						
Scanning Frequency	(H) 31~80 KHz/ (V) 56 ~ 75 Hz			NTSC: 15750Hz + 500Hz / 60Hz	(H) 31~80 KHz/ (V) 56 ~ 75 Hz		
HDMI-In	1						
VGA-In	1						
BNC-In/Out	1/1						
OSD Language	Multi-Language						
Dimensions (W x H x D)	15.12" x 14.1" x 7.8"	16.61" x 15.28" x 7.68"	17.5" x 13.3" x 6.8"	18.63 x 13.49 x 6.69"	20.1" x 15.4" x 8.0"	22" x 15.4" x 8.6"	25.5" x 17.6" x 9.8"
Net Weight	8.8lbs	10.58lbs	6.1lbs	7.9lbs	8lbs	9.9lbs	8.82lbs
Color	Black	Black	Black	Black	Black	Black	Black
VESA Mount	100mm x 100mm (M4 x 10mm Screw)			100mm x 100mm (M4 x >8mm Screw)	100mm x 100mm (M4 x 10mm Screw)		
MTBF (Approx)	30,000 Hours						
Power Consumption	<20W			<30W	<20W		
Power Source	100~240VAC						

8 & 16 Port Switches + 2 PoE

ULT-POE16-2: 16 Port + 2 PoE Switch

ULT-POE8-2: 8 Port + 2 PoE Switch

Power Supplies

Part Number	Description
IPS-1AMP	12VDC Plug-in SLIM Power Supply, 1 AMP
IPS-AC16-2-2UL	Master Power Supply: 24VAC, 16 Ch., 8.4 AMPs, 200 VA, 1.5A PTC
IPS-AC16-4-2UL	Master Power Supply: 24VAC, 16 Ch., 16.8 AMPs, 400 VA. 1.5A PTC
IPS-AC4-1-2UL	Master Power Supply: 24VAC, 4 Ch., 4.2 AMPs, 100 VA, 1.5A PTC
IPS-AC4-2-2UL	Master Power Supply: 24VAC, 4 Ch., 8.4 AMPs, 200 VA, PTC

Part Number	Description
IPS-AC8-1-2UL	Master Power Supply: 24VAC, 8 Ch., 4.2 AMPS, 100 VA, PTC
IPS-AC8-2-2UL	Master Power Supply: 24VAC, 8 Ch., 8.4 AMPs, 200 VA, 1.5A PTC
IPS-DCR16-12-2UL	Master Power Supply: Regulated 12VDC, 16 Ch, 16 AMPs, 1.5A PTC
IPS-DCR16-8-2UL	Master Power Supply: Regulated 12VDC, 16 Ch, 8 AMPs, 1.5A PTC
IPS-DCR18-18-1UL	Master Power Supply: Regulated 12VDC, 18 Ch., 18AMPs Total at 3AMP, Fused
IPS-DCR4-12-2UL	Master Power Supply: Regulated 12VDC, 4 Ch., 12 AMPS, PTC
IPS-DCR4-3.5-2UL	Master Power Supply: Regulated 12VDC, 4 Ch., 3.5 AMPs, 1.5A PTC
IPS-DCR4-8-2UL	Master Power Supply: Regulated 12VDC, 4 Ch., 8 AMPs, 2.5A PTC
IPS-DCR8-12-2UL	Master Power Supply: Regulated 12VDC, 8 Ch., 12 AMPs, 1.5A PTC
IPS-DCR8-3.5-2UL	Master Power Supply: Regulated 12VDC, 8 Ch., 4 AMPs, PTC
IPS-DCR8-8-2UL	Master Power Supply: Regulated 12VDC, 8 Ch., 8 AMPs, 1.5A PTC
IPS-VDC16-12-6UL	Master Poer Supply: Regulated 12VDC, 16 Ch., 8 AMPS, PTC, Battery Backup Function†
IPS-VDC4-12-6UL	Master Power Supply: Regulated 12VDC, 4 Ch., 4 AMPS, PTC, Battery Backup Function†
IPS-VDC8-12-6UL	Master Power Supply: Regulated 12VDC, 8 Ch., 4 AMPS, PTC, Battery Backup Function†

*Battery sold separately

Innovative Video Technology, InVid Tech, specializes in IP & TVI products while providing innovative solutions to meet the unique needs of our customers. InVid Tech offers a wealth of knowledge and experience in the security industry, providing the latest technology to help our clients stand out from the competition. InVid Tech is here to help you succeed, and as a company, we pride ourselves on the level of personal service we offer. Contact us today to find out some of the affordable products and solutions we are offering.