

# XVI ENHANCED CVI

MegaPixel over UTP/Coax



Kit Contains:  
1 - PNT-0880AILR2  
6 - XVI-50IRBTR2  
1 - USB Mouse



- 8 Ch Penta-Brid DVR with 2TB HDD plus X6 5MP IR Turret Camera
- Easy BNC Analog style Plug and Play
- Transmission over Twisted Pair (with Balun) or Coaxial Cable
- Free DDNS, VMS Software, User-Friendly GUI and Web Server
- 6 x 5MP 2.8mm Cameras with BNC Connector, Smart IR, OSD, IP67 & DC12V

# 4K

### DVR Features:

- CE • 8 CH Mini 1U Embedded LINUX processor
- FC • H.265+/H.265 dual-stream video compression
- Supports Full-channel AI-Coding
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 16 channels IP camera inputs, each channel up to 8MP; Max 128 Mbps incoming bandwidth
- Up to 2 channels video stream (analog channel) Fenced Area Protection
- Up to 8 channels video stream (analog channel) Motion Detection
- Up to 2 channel video stream (analog channel) Human Face Recognition
- IoT & POS functionalities

### AI Functions:

(Only supported on BNC Inputs 2.1MP or Higher)

- Fenced Area Protection
- Face Detection
- AI Motion



### Camera Features:

- CE • 5MP IR Turret Camera
- FC • 1/2.7" 5MP CMOS image sensor
- Max 25 fps@5MP (16:9 video output)
- XVI/CVI/CVBS/AHD/TVI switchable
- Max. IR LEDs length 60m/196.9ft, Smart IR
- D-WDR, BLC, HLC, Day/Night
- 2.8mm fixed lens
- IP67, 12V ±30% DC
- -40°C ~ +60°C (-40°F ~ +140°F)
- CVI Compatible Camera



FREE Multisite VMS software  
Download from [www.watchnetinc.com](http://www.watchnetinc.com)

## DVR Specifications:

<b>Model</b>		<b>PNT-0880AILR2</b>
<b>System</b>	Main Processor	Embedded Processor
	Operating System	Embedded LINUX
<b>Fenced Area Protection</b>	Fenced Area Performance AI by Recorder (Number of channels)	2 channels
<b>Face Detection</b>	Face Attributes	6 attributes: Gender, age groups (6), glasses, expressions (8), face mask, beard, with up to 4 detection panels displayed at the same time
	Face Detection Performance of AI by Recorder (Number of Channels)	2 channels, and a single channel can detect up to 12 faces
<b>Face Recognition</b>	Face Database Capacity	Up to 10 face databases and 20,000 picture
	Face Recognition Performance of AI by Recorder (Number of Channels)	2 channels
<b>Motion Detection</b>	Motion Detection by Recorder	Full-channel Motion Detection (AI by recorder), secondary filtering for human and motor vehicle Motion Detection, reducing false alarms caused by leaves, rain and lighting condition changes
<b>Audio and Video</b>	Analog Camera Input	8 channels, BNC: adaptive access by default; HDCVI, AHD, TVI and CVBS access can be configured
	Camera Input	1. CVI: 4K, 6MP, 5MP, 4MP, 1080P@25/30 fps, 720P@50/60 fps, 720P@25/30 fps. 2. TVI: 4K, 5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30 fps. 3. AHD: 4K, 5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30 fps.
	IP Camera Input	8+8 channels, each channel up to 8MP
	Encoding Capacity	All channel 4K(1fps-7fps); 6MP(1 fps-10 fps); 5MP (1 fps-12 fps); 4K-N, 4MP/3MP (1 fps-15 fps); 4M-N/1080P/720P/960H/D1/CIF (1 fps-25/30 fp
	Dual-stream	Supported (960H (1 fps-15 fps); D1/CIF(1 fps-25/30 fps
	Video Frame Rate	PAL: 1 fps-25 fps / NTSC: 1 fps-30 fps
	Video Bit Rate	32 Kbps-6144 Kbps Per Channel
	Audio Sampling	8 KHz, 16 bit Per Channel
	Audio Bit Rate	64 Kbps Per Channel
	Bit Rate Type	Video stream and composite stream
	Video Output	1 HDMI ,1 VGA HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720
	Multi-screen Display	When IP extension mode not enabled: 1/4/8/9 When IP extension mode enabled: 1/4/8/9/16
	<b>Compression Standard</b>	Video Compression
Audio Compression		G.711A/G.711u/PCM

<b>Network</b>	Network Protocol	HTTP, HTTPS, TCP / IP, IPv4, RTSP, UDP, SMTP, NTP, DHCP, DNS, DDNS, P2P
	Mobile Phone Access	iPhone, iPad, Android
	Interoperability	ONVIF 16.12, CGI Conformant
	Browser	Chrome, IE9 or above, Firefox
	Network Mode	Single-address mode
<b>Recording Playback</b>	Record Mode	Manual, Schedule (General, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop
	Recording Playback	1/4/9
	Backup Method	USB Device/Network
	Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)
<b>Alarm</b>	General Alarm	Motion detection, Video Loss, tampering, and local alarm
	Anomaly Alarm	No disk, disk error, low space, offline, ip conflict, MAC conflict
	Intelligent Alarm	Face detection, face recognition, fenced area protection
	Alarm Linkage	Record, snapshot (panoramic), IPC external alarm output, access controller, voice prompt, buzzer, log, preset, email
<b>Ports</b>	Audio Input	1, RCA (external) 8, BNC (coaxial)
	Audio Output	1, RCA
	Two-way Talk	Yes (share the same audio input with the first channel)
	HDD Interface	1 SATA Port, up to 16TB for a single HDD, the maximum HDD capacity varies with environment temperature
	RS-485	1 Port, for PTZ Control
	USB	2 USB Ports (1 USB 2.0, 1 USB 3.0)
	HDMI	1
<b>General</b>	VGA	1
	Network Port	1 (10/100/1000 Mbps Ethernet port, RJ-45)
	Power Supply	DC12V, 2A
	Power Consumption	Lower than 10W
	Net Weight	1.2kg (2.65lb)
	Gross Weight	1.9kg (4.19lb)
	Product Dimensions (W × D × H)	Mini 1U, 325.0mm × 256.6mm × 55.0mm 12.80" × 10.10" × 2.17"
	Packaging Dimensions	372.0mm × 117.0mm × 308.0mm (L × W × H) 14.65" × 4.61" × 12.13" (L × W × H)
	Installation	Desktop installation
	Operating Conditions	-10°C ~ +55°C (+14°F ~ +131°F)
Operating Humidity	10%-90%	

## Camera Specifications:

Model	XVI-50IRBTR2
<b>Camera</b>	
Image Sensor	1/2.7" 5MP CMOS Image Sensor
Effective Pixels	2880 (H) × 1620 (V), 5MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25s–1/100000s / NTSC: 1/30s–1/100000s
Minimum Illumination	0.01 Lux/F1.6, 30IRE, 0 Lux IR on
S/N Ratio	More than 65dB
Max IR Distance	60m (196.9ft)
IR On/Off Control	Auto / Manual
IR LEDs	2
<b>Lens</b>	
Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8mm fixed
Max Aperture	F1.6
Field of View	132° × 111° × 58° (diagonal × horizontal × vertical)
Iris Type	Fixed iris
Close Focus Distance	0.9m (3.0ft)
<b>Video</b>	
Resolution	5M (2880 × 1620); 4M (2560 × 1440); 1080P (1920 × 1080); 960 H (960 × 576/960 × 480)
Frame Rate	<p><b>CVI:</b> PAL: 5M@25 fps; 4M@25 fps; 1080P@25 fps; NTSC: 5M@25 fps; 4M@30 fps; 1080P@30 fps</p> <p><b>AHD:</b> PAL: 4M@25 fps; NTSC: 4M@30 fps</p> <p><b>TVI:</b> PAL: 4M@25 fps; NTSC: 4M@30 fps</p> <p><b>CVBS:</b> PAL: 960H; NTSC: 960H</p>
Day/Night	Auto switch by ICR
BLC/HLC/WDR	BLC/HLC/D-WDR
White Balance	Auto; manual
Gain Control	Auto; manual
Noise Reduction	2D NR
Smart IR	Yes
Mirror	Off/On
Privacy Masking	Off/On (8 area, rectangle)

<b>Port</b>	
Audio Interface	One channel built-in mic
Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
<b>Electrical</b>	
Power Supply	12V ±30% DC
Power Consumption	Max 5.2W (12V DC, IR on)
<b>Environmental</b>	
Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / <95% (non-condensation)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / <95% (non-condensation)
Ingress Protection	IP67
<b>Construction</b>	
Casing	Metal
Dimensions	φ121.9 mm × 99.1 mm (φ4.8" × 3.9")
Net Weight	0.4kg (0.88lb)
Gross Weight	0.6kg (1.32lb)

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