

XVI

ENHANCED CVI
MegaPixel over UTP/Coax



Kit Contains:
1 – PNT-0480AILR2
4 – XVI-50IRBTR2
1 – USB Mouse

PNT-0480AILR2



- 4 Ch Penta-Brid DVR with 1TB HDD plus X4 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
- 4 x 5MP 2.8mm Cameras with BNC Connector, Smart IR, OSD, IP67 & DC12V

4K

DVR Features:

- CE • 4 CH Mini 1U Embedded LINUX processor
- H.265+/H.265 dual-stream video compression
- FC • Supports Full-channel AI-Coding
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 8 channels IP camera inputs, each channel up to 8MP; Max 64 Mbps incoming bandwidth
- Up to 1 channel video stream (analog channel) Fenced Area Protection
- Up to 4 channels video stream (analog channel) Motion Detection
- Up to 1 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



DVR Specifications:

Model	PNT-0480AILR2	
System	Main Processor	Embedded Processor
	Operating System	Embedded LINUX
Fenced Area Protection	Performance	1 channels, 10 IVS for each channel
	Object classification	Human/Vehicle secondary recognition for line crossing and intrusion
	AI Search	Search by target classification (Human, Vehicle)
Face Recognition	Performance	Max 8 face pictures/sec processing 1 channels video stream face recognition on BNC Inputs Only 2.1MP or higher
	Stranger Mode	Detect strangers' faces (not in device's face database). Similarity threshold can be set manually.
	AI Search	Up to 8 target face images search at same time, similarity threshold can be set for each target face image
	Database Management	Up to 10 face databases with 20,000 face images in total. Name, gender, birthday, address, certificate type, certificate No., countries & regions and state can be added to each face picture
	Database Application	Each database can be applied to video channels independently
	Trigger Events	Buzzer, Voice Prompts, Email, Snapshot, Recording, Alarm Out, PTZ Activation, etc.
	AI Motion	Performance
Video and Audio	AI Search	Search by target classification (Human, Vehicle)
	Analog Camera Input	4 channels, BNC
	HDCVI Camera Input	4K, 6MP, 5MP, 4MP, 1080p@ 25/30 fps, 720p@ 50/60 fps, 720p@ 25/30 fps
	AHD Camera Input	4K, 5MP, 4MP, 3MP, 1080p@ 25/30 fps, 720p@ 25/30 fps
	TVI Camera Input	4K, 5MP, 4MP, 3MP, 1080p@ 25/30 fps, 720p@ 25/30 fps
	CVBS Camera Input	PAL/NTSC
	IP Camera Input	4+4 channels, each channel up to 8MP
	Audio In/Out	1/1, RCA
	Two-way Talk	Reuse audio in/out, RCA
	Recording	Compression
Resolution		4K; 6MP; 5MP; 4MP; 3MP; 4M-N; 1080p; 720p; 960H; D1; CIF
Record Rate		Main stream: All channel 4K (1 fps-7 fps); 6MP (1 fps-10 fps); 5MP (1 fps-12 fps); 4MP/3MP (1 fps-15 fps); 4M-N/1080p/720p/960H/D1/CIF (1 fps-25/30 fps); Sub stream: 960H (1 fps-15 fps); D1/CIF (1 fps-25/30 fps)
Bit Rate		32 Kbps-6144 Kbps Per Channel
Record Mode		Manual, Schedule (General, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop
Record Interval		1 - 60 min (default: 60 min), Pre-record: 1 s-30 s, Post-record: 10 s-300 s
Audio Compression		G.711A; G.711U; PCM
Audio Bit Rate		8 KHz, 16 bit Per Channel 64 Kbps Per Channel

Display	Interface	1 HDMI, 1 VGA
	Resolution	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 When IP extension mode enabled: 1/4/8/9
	OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording
Network	Interface	1 RJ-45 Port (100 MB)
	Network Function	HTTP, HTTPS, TCP/IP, IPv4/IPv6, Wi-Fi, 3G/4G, SNMP, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, P2P, IP Search (Supports WatchNET IP camera, DVR, NVS, etc.)
	Max. User Access	128 users
	Smart Phone	iPhone, iPad, Android
	Interoperability	ONVIF 16.12, CGI Conformant
Video Detection and Alarm	Trigger Events	Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
	Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis
	Alarm input	N/A
	Relay Output	N/A
Playback and Backup	Playback	1/4
	Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)
	Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom
	Backup Mode	USB Device/Network
Storage	Internal HDD	1 SATA Port, up to 10TB capacity
	eSATA	N/A
Auxiliary Interface	USB	2 USB Ports (USB 2.0)
	RS485	1 Port, for PTZ Control
	RS232	N/A
Electrical	Power Supply	DC 12V/2A
	Power Consumption	<7W (Without HDD)
Construction	Dimensions	Mini 1U, 325 mm × 256.6 mm × 55 mm (12.80" × 10.10" × 2.17")
	Net Weight	1.3 kg (2.87 lb)
	Gross Weight	1.76 kg (3.88 lb)
	Installation	Desktop installation
Environmental	Operating Conditions	-10°C ~ +55°C (+14°F ~ +131°F), 0~90% RH
	Storage Conditions	-20°C ~ +70°C (-4°F ~ +158°F), 0~90% RH

Camera Specifications:

Model	XVI-50IRBTR2
Camera	
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
Lens	
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)
Video	
Resolution	5M (2880 × 1620); 4M (2560 × 1440); 1080P (1920 × 1080); 960 H (960 × 576/960 × 480)
Frame Rate	<p>CVI: PAL: 5M@25 fps; 4M@25 fps; 1080P@25 fps; NTSC: 5M@25 fps; 4M@30 fps; 1080P@30 fps</p> <p>AHD: PAL: 4M@25 fps; NTSC: 4M@30 fps</p> <p>TVI: PAL: 4M@25 fps; NTSC: 4M@30 fps</p> <p>CVBS: 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)

Port	
Audio Interface	One channel built-in mic
Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Electrical	
Power Supply	12V ±30% DC
Power Consumption	Max 5.2W (12V DC, IR on)
Environmental	
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
Construction	
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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