

4K



Kit Contains:
1 – ENI-16POE
8 – MPIX-50T3MAI
1 – USB Mouse



Easy auto enroll / plug & play with built-in POE

- Includes everything you need – Just add Ethernet
- 16 Ch Embedded NVR plus 8x 5.0MP Turret Camera
- Plug and Play Setup with Camera Auto Enroll Feature
- Free DDNS, VMS Software, User-Friendly GUI and Web Server



NVR Features:

16 CH with 16 PoE Ports built-in NVR

- Embedded LINUX OS
- Industrial-grade embedded processor
- H.264, H.265, Smart H.264+, and Smart H.265+. H.265 auto switch
- Max. decoding capability: 8 × 1080p@30 fps.
- Supports mainstream cameras of ONVIF and RTSP protocols
- P2P remote surveillance, video play on mobile device
- VGA/HDMI simultaneous video output, maximum resolution of HDMI is 4K
- **AI by Camera:** Face detection, fenced area protection, IVS, people counting, heat map, and motion detection
- *** (AI Features only supported when using AI Cameras)**



Camera Features:

5MP, 1/2.7" CMOS image sensor, low illuminance

- 5 Megapixel 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 5 MP (2960 × 1668) @20 fps, and supports 2688×1520 (2688 × 1520) @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light and IR LED, the max. illumination distance is 30 m and the max. warm light distance is 30 m.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, video tampering, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- IP67 protection.
- Smart Motion Detection Plus.

AI Functions:

- Fenced Area protection
- AI Motion Detection
- Line Crossing (Person & Vehicle Classification)



FREE Multisite VMS software
Download from www.watchnetinc.com



Technical Specifications	
System	
Main Processor	Industrial-grade processor
Operating System	Embedded Linux
Operation Interface	Web, Local GUI
AI	
AI by Recorder	SMD
AI by Camera	Face detection; face recognition; perimeter protection; SMD; people counting; stereo analysis; heat map
Perimeter Protection	
Perimeter Performance of AI by Camera (Number of Channels)	6 channels
Face Detection	
Face Attributes	Gender; age group; glasses; expressions; face mask; beard
Face Detection Performance of AI by Camera (Number of Channels)	6 channels
Face Recognition	
Face Recognition Performance of AI by Camera (Number of Channels)	6 channels
SMD Plus	
SMD Plus by Recorder	4 channels: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change
SMD Plus by Camera	All channels
Audio and Video	
Access Channel	16 channels
Video Output	1 HDMI, 1 VGA Simultaneous : HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720 Heterogeneous : HDMI: 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720
Port	
Audio Input	1-channel RCA
Audio Output	1-channel RCA
Alarm Input	4 channels
Alarm Output	2 channels (1-channel 12 V 1 A output)

Disk Interface	2 SATA port. Each disk can contain up to 20 TB. This limit varies depending on the environment temperature.
RS-232	1
USB	2 (1 front USB 2.0 port, 1 rear USB 2.0 port)
HDMI	1
VGA	1
Network Port	1 (10/100/1000 Mbps Ethernet port, RJ-45)
PoE Port	16 ports, 10/100 Mbps, IEEE 802.3 af/at
General	
Power Supply	100–240 VAC, 50/60 Hz
Power Consumption	Total output of NVR is <10 W(without HDD) Total output power of PoE is 130W,the maximum output power of a single port is 25.5W
Certifications	CE-EMC: EN 55032:2015+A1:2020; EN IEC 61000-3-2:2019+A1:2021; EN 61000-3-3:2013+A1:2019+A2:2021; EN 55035:2017+A11:2020; EN 50130-4: 2011+A1:2014 CE-LVD: EN 62368-1:2014

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Model	MPIX-50T3MAI
Camera	
Image Sensor	1/2.7" CMOS
Max. Resolution	2960 (H) × 1668 (V)
ROM	128 MB
RAM	256 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. illumination	0.007 lux@F1.5 (Color, 30 IRE) 0.0007 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	up to 30 m (98.43 ft) (IR); up to 30 m (98.43 ft) (Warm light)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	1 warm light + 1 IR LED
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°
Image Sensor	1/2.7" CMOS
Lens	
Max Aperture	F1.6
Focal Length	Fixed 2.8mm lens
Optical Zoom	N/A
Mount Type	M12
Angle of View	Horizontal: 98°; vertical: 72°; diagonal: 130°
Close Focus Distance	0.9m/3ft
Aperture Type	Fixed
Video	
Compression	H.265; H.264; H.264H; H.264B; MJPEG
Smart Codec	Yes
Resolution	5M (2960 × 1668); 4M (2688 × 1520); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Frame Rate	Main Stream: (2960 × 1668@1–20 fps) (2688 × 1520@1–25/30 fps) Sub Stream: (704 × 576@1–25 fps/ 704 × 480@1–30 fps) Third Stream: 1280 × 720@1–25/30 fps
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 3 Kbps–8192 Kbps H.265: 3 Kbps–8192 Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(120dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Digital Zoom	N/A
Flip	(Support 90°/270° with 1920 × 1080 resolution)
Mirror	Yes
Privacy Masking	Off / On (4 Area, Rectangle)

Professional Intelligence	
Fenced Area Protection	Line Crossing, Intrusion (Human & Vehicle classification)
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
Audio	
Audio Compression	G.711a; G.711Mu; G726; AAC
Network	
Ethernet	RJ-45 (10/100 Base-T)
Protocol	IPv4;IPv6;HTTP;HTTPS;TCP;UDP;ARP;RTP;RTSP;R TCP;R TMP;SMTP;FTP;SFTP;DHCP;DNS;DDNS;QoS;UPnP ;NTP; Multicast;ICMP;IGMP;NFS;PPPoE;802.1x;SNMP
Interoperability	ONVIF(Profile S/Profile G/Profile T); P2P
Streaming Method	Unicast / Multicast
Max. User Access	20 (Total bandwidth: 64M)
Scene	Yes
Self-adaptation	
Max. User / Host	20 Users (Total bandwidth: 64 M)
Edge Storage	FTP; SFTP; Micro SD Card (support max. 256GB); WatchNET Cloud; NAS
Electrical	
Power supply	12V DC/PoE (802.3af)
Power Consumption	<8.1W
Environmental	
Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / less than≤95%
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F)
Ingress protection	IP67
Construction	
Casing	Metal
Dimensions	99.1 mm × Φ121.9 mm (3.9" × Φ4.8")
Net Weight	480 g (1.05 lb)
Gross Weight	660 g (1.45 lb)

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