

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
- New 4.0 user interface, Security baseline 2.1
- H.264, H.265, Smart H.264+, and Smart H.265+. H.265 auto switch
- Max. decoding capability: 8 × 1080p@30 fps. Supports adaptive decoding
- 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



ENI-16POE Technical Specifications	
System	
Main Processor	Industrial-grade embedded processor
OS	Embedded Linux
Operation Interface	Web/operating in local GUI
Fenced Area Protection by Camera	
Performance	8 channels
AI Search	Search for pictures by channel, time and event type
Face Detection by Camera	
Performance	4 channels
Face Attributes	6 attributes: Gender, age, glasses, expression, mouth mask, and beard
AI Search	Search for pictures by channel, time and face attributes
Motion Detection by Camera	
Performance	12 channels
AI Search	Search by target classification (human, vehicle)
Video	
Access Channel	16
Network Bandwidth	Access: 80 Mbps; Storage: 80 Mbps; Forward: 60 Mbps
Resolution	8MP; 6MP; 5MP; 4MP; 3MP; 1080p; 720p; D1
Decoding Capability	8 × 1080p@30 fps
Video Output	1 × VGA output, 1 × HDMI output, supports simultaneous video sources output for VGA & HDMI
Multi-screen Display	1, 4, 8, 9 views
Third-party Camera Access	ONVIF; RTSP
Compression	
Video	Smart H.265/H.265/Smart H.264/H.264/MJPEG
Audio	PCM/G711A/G711U/G726/AAC
Network	
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UPnP; SNMP;
	RTSP; UDP; SMTP; NTP; DHCP; DNS; IP Filter;
	DDNS; FTP; Alarm Server; IP Search (Support
	WatchNET IP camera; DVR; NVS; etc.); P2P; auto register
Mobile Phone Access	Android; iOS
Interoperability	ONVIF(profile T/S/G); CGI; SDK
Browser	Chrome; IE9 or later; Firefox

Record Playback	
Multi-channel Playback	Up to 16 channels for playback
Record Mode	Manual record; alarm recording; Motion Detection recording; smart recording
Storage	Local HDD; network
Backup	USB storage device
Playback Function	1. Play/pause/stop/slow/quick/backward/by frame 2. Fullscreen, backup (video clip/file), partial zoom in, and audio on/off
Storage	
Disk Group	Yes
Alarm	
General Alarm	Motion detection, privacy masking, video loss, scene changing, PIR alarm, IPC external alarm
Anomaly Alarm	Camera disconnection, storage error, disk full, IP conflict, MAC conflict, login locked, and cyber security exception
Intelligent Alarm	Face detection, fenced area protection (intrusion and line crossing), IVS, people counting, heat map, and motion detection alarms
Alarm Linkage	Recording, snapshot, audio, buzzer, log, preset, and email
External Port	
Audio Input	1 × RCA input
Audio Output	1 × RCA output
HDD	2 SATA III ports, up to 10 TB for a single HDD. The maximum HDD capacity varies with environment temperature
USB	2 (1 × front USB2.0; 1 × back USB2.0)
HDMI	1 (supports up to 4K resolution output)
VGA	1
Network	1 × RJ-45, 10/100 Mbps self-adaptive Ethernet port
POE	8
General Parameter	
Power Supply	DC48 V/53 V, 2A/1.8 A
Power Consumption	< 10 W (HDD not included, idling) Total output power of PoE is 72W, the maximum output power of a single port is 25.5W
Net Weight	0.92kg (2.03lb)
Gross Weight	2.07kg (4.56lb)
Product Dimensions	260mm × 232.3mm × 50.3mm (10.24" × 9.14" × 1.98") (W × L × H)
Package Dimensions	117mm × 373mm × 307mm (4.61" × 14.69" × 12.09") (W × L × H)
Operating Conditions	−10°C to +55°C (+10°F to +131°F)
Storage Conditions	0°C to +40°C (32°F to 104°F)
Operating Humidity	10c/o ~ 93c/o
Storage Humidity	30% ~ 85%
Operating Altitude	3000m (9842.52ft)
Installation	Desktop mounted
Certification	CE, FCC

Model MPIX-50T3MAI		Professional Intelligence	
Camera		Fenced Area Protection	Line Crossing, Intrusion (Human & Vehicle classification)
Image Sensor	1/2.7" CMOS	Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
Max. Resolution	2960 (H) × 1668 (V)	Audio	
ROM	128 MB	Audio Compression	G.711a; G.711Mu; G726; AAC
RAM	256 MB	Network	
Scanning System	Progressive	Ethernet	RJ-45 (10/100 Base-T)
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s	Protocol	IPv4;IPv6;HTTP;HTTPS;TCP;UDP;ARP;RTP;RTSP;RTP;R;TCP;R;TMP;SMTP;FTP;SFTP;DHCP;DNS;DDNS;QoS;UPnP;NTP;Multicast;ICMP;IGMP;NFS;PPPoE;802.1x;SNMP
Min. illumination	0.007 lux@F1.5 (Color, 30 IRE) 0.0007 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on)	Interoperability	ONVIF(Profile S/Profile G/Profile T); P2P
S/N Ratio	>56 dB	Streaming Method	Unicast / Multicast
Illumination Distance	up to 30 m (98.43 ft) (IR); up to 30 m (98.43 ft) (Warm light)	Max. User Access	20 (Total bandwidth: 64M)
Illuminator On/Off Control	Auto/Manual	Scene	Yes
Illuminator Number	1 warm light + 1 IR LED	Self-adaptation	
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°	Max. User / Host	20 Users (Total bandwidth: 64 M)
Image Sensor	1/2.7" CMOS	Edge Storage	FTP; SFTP; Micro SD Card (support max. 256GB); WatchNET Cloud; NAS
Lens		Electrical	
Max Aperture	F1.6	Power supply	12V DC/PoE (802.3af)
Focal Length	Fixed 2.8mm lens	Power Consumption	<8.1W
Optical Zoom	N/A	Environmental	
Mount Type	M12	Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / less than≤95%
Angle of View	Horizontal: 98°; vertical: 72°; diagonal: 130°	Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F)
Close Focus Distance	0.9m/3ft	Ingress protection	IP67
Aperture Type	Fixed	Construction	
Video		Casing	Metal
Compression	H.265; H.264; H.264H; H.264B; MJPEG	Dimensions	99.1 mm × Φ121.9 mm (3.9" × Φ4.8")
Smart Codec	Yes	Net Weight	480 g (1.05 lb)
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)	Gross Weight	660 g (1.45 lb)
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	<i>* All product names, logos and brands are property of their respective owners. All company products and service names used on this box/website/brochure are for identification purposes only. Use of these names, logos and brands does not imply endorsement. 2021 WatchNET Inc.</i> © All Rights Reserved. All product specifications are subject to change without notice	
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)		

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