



4MP Clear Imaging	AI Perimeter Protection	Vari-focal Flexibility	Built to Last
1/2.9" CMOS, Smart H.265+, 40 m IR range	Tripwire & intrusion with human/vehicle filtering	Motorized 2.7-13.5 mm lens, remote zoom & focus	IP67 & IK10, metal casing, 12 VDC/PoE

AI Dome Camera for Demanding Environments

4MP starlight imaging combined with deep-learning perimeter protection. The motorized vari-focal lens, built-in microphone and rugged IP67/IK10 housing make it ideal for indoor and outdoor professional surveillance.

FEATURES

- 4 MP 1/2.9" CMOS image sensor with low-light, high-definition imaging
- Max. 4 MP (2688 x 1520) @20 fps; supports 2560 x 1440 @25/30 fps
- H.265 codec with high compression and ultra-low bit rate
- Built-in IR LED, illumination distance up to 40 m
- ROI, Smart H.264+/H.265+ flexible coding for any bandwidth or storage
- Rotation mode, WDR, 3D NR, HLC, BLC and digital watermarking
- AI perimeter protection: intrusion and tripwire with human/vehicle classification
- Abnormality detection: tampering, audio, SD card, network and voltage events
- Built-in microphone and microSD storage up to 256 GB
- 12 VDC / PoE power supply for easy installation
- IP67 and IK10 vandal-proof, weatherproof protection
- Intelligent Motion Detection with target classification

MT-IPD2500AI

TECHNICAL SPECIFICATIONS

Camera	
Image Sensor	1/2.9" CMOS
Max. Resolution	2688 (H) x 1520 (V)
ROM	128 MB
RAM	128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s-1/100,000 s
Min. Illumination	0.006 lux@F1.5 (Color, 30 IRE); 0.0006 lux@F1.5 (B/W, 30 IRE); 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	40 m (131.23 ft) (IR LED)
Illuminator On/Off Control	Auto; Manual
Illuminator Number	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°-355°; Tilt: 0°-75°; Rotation: 0°-355°

Video	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (sub stream only)
Advanced Codec	Smart H.265+; Smart H.264+
Video Frame Rate	Main: 2688 x 1520@(1-20 fps) / 2560 x 1440@(1-25/30 fps); Sub: 704 x 576@(1-25 fps) / 704 x 480@(1-30 fps)
Stream Capability	2 streams
Resolution	2688 x 1520; 2560 x 1440; 2304 x 1296; 1080p; 1.3M; 720p; D1; VGA; CIF
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps-6144 kbps; H.265: 12 kbps-6144 kbps
Day/Night	Auto (ICR) / Color / B/W
BLC	Yes
HLC	Yes
WDR	120 dB
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Manual; Auto
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (90°/270° with 2688 x 1520 and lower)
Mirror	Yes
Privacy Masking	4 areas

Power	
Power Supply	12 VDC / PoE (802.3af)
Power Consumption	Basic: 2.3 W (12 VDC) / 3.2 W (PoE); Max.: 6.4 W (12 VDC) / 7.6 W (PoE)

Structure	
Casing Material	Metal
Product Dimensions	93.4 mm x ϕ 122 mm (3.68" x ϕ 4.80")
Net Weight	0.49 kg (1.08 lb)
Gross Weight	0.66 kg (1.46 lb)

Lens			
Lens Type	Motorized vari-focal		
Lens Mount	ϕ 14		
Focal Length	2.7 mm-13.5 mm		
Max. Aperture	F1.5		
Field of View	H: 104°-29°; V: 54°-16°; D: 125°-34°		
Iris Control	Fixed		
Close Focus Distance	0.8 m (2.62 ft)		
DORI Distance	Lens	W	T
	Detect	64.0 m	210.0 m
	Observe	25.6 m	84.0 m
	Recognize	12.8 m	42.0 m
	Identify	6.4 m	21.0 m

Intelligent	
IVS (Perimeter Protection)	Intrusion, tripwire (both support classification and accurate detection of vehicle and human)
Smart Search	AI-powered quick target search (find specific person or vehicle in seconds)

Audio	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; G.726; PCM

Alarm Event	
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; Intelligent Motion Detection; video tampering; tripwire; intrusion; audio detection; voltage detection; defocus detection; security exception

Network	
Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; NTP; Multicast; ICMP; IGMP; P2P
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI
User/Host	6 (Total bandwidth: 36 M)
Storage	FTP; SFTP; Micro SD card (max. 256 GB)
Browser	IE; Chrome; Firefox
Management Software	ONVIF (Profile S/G/T), CGI, compatible VMS
Mobile Client	iOS; Android
Security	Digest; WSSE; Account lockout; Security logs; IP/MAC filtering; X.509 certificate import; syslog; HTTPS; 802.1x; Trusted boot/execution/upgrade

Environment	
Operating Temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Operating Humidity	≤95%
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Protection	IP67; IK10

Certifications	
Certifications	CE-LVD: EN62368-1; CE-EMC: 2014/30/EU; FCC: 47 CFR Part 15 Subpart B; UL/CUL: UL62368-1 & CAN/CSA C22.2 No. 62368-1-14

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DIMENSIONS

