

## CTX-5MP-IPC-BUL5-MW

### 5MP AI IR VARIFOCAL NETWORK TURRET CAMERA



#### Series Overview

With starlight and deep learning algorithm, this network camera has various intelligent functions, including face capture, perimeter protection and people counting, which greatly improve the accuracy of video analysis.

#### Functions

##### Face Detection

Face detection technology can detect faces in images. With deep learning algorithms, the technology supports detecting, tracking, capturing and selecting the best face images, and then outputs face snapshots.

##### Face Attributes

With deep learning algorithms, the network camera can recognise face attributes, such as gender, age, expression, glasses, masks and beards.

##### Perimeter Protection

With deep learning algorithms, Perimeter Protection technology can recognise people and vehicles accurately. In restricted areas (such as pedestrian area and vehicle area), false alarms from intelligent analytics (such as tripwire, intrusion, fast moving objects, parking detection, loitering detection and gathering detection) are largely reduced.

##### People Counting

People Counting technology can track and process moving targets for accurate statistics of people entering, exiting, and gathering in an area. Working with management platforms, it outputs yearly/monthly/daily reports to meet your requirements.

- 5-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 5 MP (2592 × 1944)@20 fps.
- Built-in IR LED, and the max. illumination distance is 60 m.
- ROI, SVC, SMART H.264+/H.265+, AI H.264/H.265, encoding after filter, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Three switchable intelligent resources: IVS, face detection, and people counting.
- Alarm: 2 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card.
- 12 VDC/PoE power supply, easy for installation.
- IP67 and IK10 protection; ePoE.
- SMD 3.0.



#### ePoE

ePoE technology offers a solution to transmit power and data over long distances between cameras and network switches, allowing more flexible design of surveillance systems, improving reliability, reducing installation time and saving money. ePoE technology encompasses pure network systems where a single CAT6 cable can carry signals up to 300 m (984 ft) at 100 Mbps, 800 m (2625 ft) at 10 Mbps.

#### Cyber Security

This camera employs a series of security technologies, including security authentication and authorisation, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

#### Protection (IP67, IK10, wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has a dust-proof function, and the enclosure works as normal after soaking in 1m deep water for 30 minutes.

IK10: The enclosure can stand more than 5 hits from a 5kg hammer falling from a height of 40 cm (Impact energy is 20J).

Wide voltage: The camera allows ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environments with unstable voltage.

Technical Specification

Camera	
Image Sensor	1/2.7" CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	1GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.003 lux@F1.8 (Color, 30 IRE) 0.0003 lux@F1.8 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	130 m (426.51 ft) (IR)
Illuminator On/Off Control	Auto
Illuminator Number	4 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Lens					
Lens Type		Motorized vari-focal			
Lens Mount		Module			
Focal Length		7 mm–35 mm			
Max. Aperture		F1.3			
Field of View		Horizontal: 31°–9° Vertical: 23°–7° Diagonal: 39°–11°			
Iris Control		Hall			
Close Focus Distance		W–T: 0.4 m–2 m (1.31 ft–6.56 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	190 m (623.36 ft)	76 m (249.34 ft)	38 m (124.67 ft)	19 m (62.34 ft)
	T	620 m (2,034.12 ft)	248 m (813.65 ft)	124 m (406.82 ft)	62 m (203.41 ft)

Smart Event	
IVS	Abandoned object; missing object
Heat Map	Yes

Professional, intelligent	
IVS (Perimeter Protection)	Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection, people gathering, and parking detection
SMD 3.0	Less false alarm, longer detection distance
Face Detection	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face attributes extraction including 6 attributes (gender, age, glasses, expressions, mask, and beard) and 8 expressions (angry, sad, disgusted, scared, surprised, calm, happy, confused); face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot,

People Counting	Tripwire people counting and people counting in area; generating and exporting report (day/month/year); queue management; 4 rules can be set for tripwire, people counting in area and queue management
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
Video	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
AI Coding	AI H.265; AI H.264
Video Frame Rate	Main stream: 2592 × 1944@(1 fps–20 fps); 2688 × 1520@(1 fps–25/30 fps) Sub stream: D1@(1 fps–50/60 fps) Third stream: 1080p@(1 fps–50/60 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.
Stream Capability	3 streams
Resolution	2592 × 1944; 2688 × 1520; 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)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps–8192 kbps H.265: 32 kbps–8192 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation (SSA)	Yes
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Auto; manual
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Image Stabilization	Electronic Image Stabilization (EIS)
Smart Illumination	Yes
Defog	Yes
Image Rotation	0°/90°/180°/270°
Mirror	Yes
Privacy Masking	8 areas
Audio	
Audio Compression	PCM; G.711a; G.711Mu; G.726; G.723
Alarm	
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; defocus detection; tripwire; intrusion; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; input error; voltage detection; face detection: people counting in area: stav detection:

Network	
Network Port	RJ-45 (10/100 Enhancement Base-T)
SDK and API	Yes
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; Bonjour
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone
User/Host	20 (Total bandwidth: 88 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS
Browser	IE: IE8 and later Chrome Firefox
Management Software	Smart PSS, DSS, DMSS
Mobile Client	iOS; Android

Certification	
Certifications	CE-LVD: EN 62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07

Port	
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	2 channels in: 5 mA 3–5 VDC
Alarm Output	1 channel out: 300 mA 12 VDC

Power	
Power Supply	12 VDC (±30%); PoE (802.3af); ePoE
Power Consumption	Basic: 3 W (12 VDC); 3.7 W (PoE) Max. (max. stream + IR LED + focus): 9.9 W (12 VDC); 10.9 W (PoE)

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

Structure	
Casing	Metal + plastic
Product Dimensions	273.2 mm × 95 mm × 95 mm (10.76" × 3.74" × 3.74") (L × W × H)
Net Weight	1110 g (2.45 lb)
Gross Weight	1510 g (3.33 lb)

