

## CTX-8MP-IPC-TUR3-FW

### 8MP SMD IR FIXED FOCAL IP TURRET CAMERA



AI technology and deep learning algorithms focus on human and vehicle with high accuracy, enabling users to fast act on defined targets.

#### Series Overview

With advanced deep learning algorithm, this network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

#### Functions

##### SMD Plus

With intelligent algorithm, Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

##### Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

##### Perimeter Protection

With deep learning algorithm, Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, fast moving,

- 8MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- Outputs max. 8MP (3840 × 2160) @20 fps (AI function enabled by default) and supports 8MP (3840 × 2160) @25/30 fps (when AI function disabled)
- H.265 codec, high compression rate, low bit rate
- Built-in IR LED, max. IR distance: 30 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire (support the classification and accurate detection of vehicle and human)
- Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection
- Supports max. 256 G Micro SD card, built-in Mic
- 12V DC/PoE power supply
- IP67 protection
- SMD Plus



##### Starlight

Starlight technology mainly applies to the environment of low illumination, and it can provide clear colorful video. Even in the environment of min. illumination, the technology can guarantee the good image effect.

##### WDR

With advanced Wide Dynamic Range (WDR) technology, this network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

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

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

Wide voltage: The camera allows ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

**Technical Specification**

**Camera**

Image Sensor	1/2.8"8Megapixel progressive CMOS
Max. Resolution	3840 (H) × 2160 (V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.007 Lux @F1.4
S/N Ratio	>56 dB
Illumination Distance	30 m (98.4 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

**Lens**

Lens Type	Fixed-focal				
Mount Type	M12				
Focal Length	2.8 mm				
Max. Aperture	F1.4				
Field of View	2.8 mm: Horizontal 108° × Vertical 58° × Diagonal 127°				
Iris Type	Fixed				
Close Focus Distance	2.8 mm: 1.4 m (4.6 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	85.5 m (280.5 ft)	34.2 m (112.2 ft)	17.1 m (56.1 ft)	8.6 m (28.2 ft)

**Professional, intelligent**

Perimeter Protection	Tripwire; intrusion (support the classification and accurate detection of vehicle and human)
Intelligent 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+
Video Frame Rate	Main stream: 3840 × 2160 @(1–20 fps by default) 3840 × 2160 @(1–25/30 fps when AI function disabled) sub stream: 704 × 576 @(1–25 fps)/704 × 480 @ (1–30 fps) third stream: 1920 × 1080 @(1–25/30 fps)
Stream Capability	3 streams

Resolution	8M (3840 × 2160); 6M (3072 × 2048); 5M (3072 × 1728/2592 × 1944); 4M (2688 × 1520); 3M (2048 × 1536/2304 × 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: 3 kbps–8192 kbps H.265: 3 kbps–8192 kbps
Day/Night	Auto (ICR)/Colour/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas

**Audio**

Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; G726; AAC

**Alarm**

Alarm Event	No SD card; SD card full; SD card error; service life warning (only supported by Dahua card); network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio detection; voltage detection; SMD; safety exception
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**Network**

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; 802.1x; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec
User/Host	20 (Total bandwidth: 72 M)
Storage	Dahua Cloud (only supported by Dahua version); FTP; SFTP; Micro SD card (support max. 256 G); NAS

Browser	IE: IE8; IE9; IE11 Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS; Android

**Certification**

Certifications	CE-LVD: EN62368-1 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
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**Power**

Power Supply	12V DC/PoE (802.3af)
Power Consumption	Basic power consumption: 2.6W (12V DC); 3.3W (PoE) Max. power consumption (WDR + H.265 + IR LED intensity): 6.9W (12V DC); 7.9W (PoE)

**Environment**

Operating Conditions	-40°C to +60°C (-40°F to +140°F)/Less than 95% RH
Storage Conditions	-40°C to +60°C (-40°F to +140°F)
Protection Grade	IP67

**Structure**

Casing	Inner core: Metal Cover: Metal Decoration ring: Plastic
Dimensions	99.1 mm × Φ121.9 mm (3.8" × Φ4.7")
Net Weight	500 g (1.1 lb)
Gross Weight	770 g (1.7 lb)

**Dimensions (mm[inch])**

