2x4MP TiOC Duo Splicing Fixed-focal Bullet WizSense Network Camera



TiOC DUO

Launched by Dahua Technology, WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

Series Overview

Dahua WizSense 3 Series Network Camera greatly saves on bandwidth and storage space through its AI Coding technology. Driven by its advanced deep learning algorithms, the camera supports intelligent functions such as perimeter protection, smart motion detection (SMD), Quick Pick, making it easy and convenient to use. Starlight technology and its large aperture lens also allow the camera to produce clear, vivid images even in poor lighting conditions.

Functions

SMD 4.0

Dahua Smart Motion Detection technology works with intelligent algorithms to classify targets that trigger motion detection alarms. It filters out objects that are not targets, such as small and large animals, to avoid triggering false alarms. With an AI NVR, Quick Pick technology becomes available, allowing you to easily search for and pick out human and vehicle targets from SMD event videos, prioritizing the highest matches.

EPTZ

With advanced target detection and tracking algorithms, Dahua EPTZ technology can simultaneously zoom in and track multiple humans and vehicles that trigger alarms. It provides rich details and a panoramic view at the same time.

Siren and Light Active Deterrence

Dahua siren and light active deterrence network camera supports the light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in multiple voices for selection, and supports customized voice importing.

- Outputs 180° wide angle splicing image.
- Outputs max. 8 MP (4096 × 1860)@20 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED and warm light, the max. IR illumination distance is 25 m and warm light distance is 20 m.
- ROI, SMART H.264 +/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.
- WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card; built in dual Mic; built in speaker, support two-way talk.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.
- Sound and light alarm (red and blue lights).
- EPTZ: Enlarge and track the targets of intelligent alarms.
- SMD 4.0.
- One-tap arming/disarming through alarm input.



Smart Dual Light

Dahua Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the warm light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the warm light is off and the IR illuminator is on, which reduces light pollution efficiently.

One-tap Disarming

Dahua One-tap Disarming function, which is convenient and easy for operation, is the switch for event linkage. Customers can close and recover event linkage through mobile App, which meets multi-scenarios needs.

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 can works normal after soaking in 1 m deep water for 30 minutes.
Wide voltage: The camera allows ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Cyber Security

Dahua network cameras employ a series of security technologies, including security authentication and authorization, 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.

WizSense

Technical Specification

Camera

Image Sensor	Dual 1/2.7" CMOS
Max. Resolution	4096 (H) × 1860 (V)
ROM	128 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 lux@F1.4 (Color, 30 IRE) 0.0005 lux@F1.4 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	Up to 25 m (82.02 ft) (IR LED) Up to 20 m (65.62 ft) (Warm light)
Illuminator On/Off Control	Auto; Manual
Illuminator Number	2 (IR LED); 2 (Warm light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–77° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal				
Lens Mount	M12				
Focal Length	2.8 mm				
Field of View	Horizontal: 180°; Vertical: 86°				
Max. Aperture	F1.4				
Iris Control	Fixed				
Close Focus Distance	0.8 m (2.62 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	50.6 m (166.01 ft)	20.2 m (66.27 ft)	10.1 m (33.14 ft)	5.1 m (16.73 ft)

Intelligence

IVS (Perimeter Protection)	Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
SMD	SMD 4.0
Quick Pick	With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events.
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.
EPTZ	Enlarge and track the targets of intelligent alarms

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: 4096 × 1860@(1–20 fps) Sub stream: 1200 × 530@(1–20 fps) Third stream: 1920 × 860@(1–20 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	4096 × 1860; 3632 × 1632; 3040 × 1368; 1200 × 530; 1920 × 860; 960 × 432
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 6 kbps –16384 kbps H.265: 6 kbps –16384 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
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Privacy Masking	4 areas
Defog	Yes

Audio

Built-in MIC	Yes, built-in dual Mic
Built-in Speaker	Yes, built-in speaker
Audio Compression	G.711a; G.711Mu; PCM; 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; tripwire; intrusion; scene chaging; audio detection; voltage detection; external alrm; SMD; security exception

Network

Network Port	RJ-45 (10/100 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; P2P
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS

Browser	IE: IE 8 and later Chrome Firefox
Management Software	Smart PSS Lite; DSS; DMSS
Mobile Client	iOS; Android

Certification

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU

Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: wet contact, 5 mA 3 V–5 VDC
Alarm Output	1 channel out: wet contact, 300 mA 12 VDC

Power

Power Supply	12 VDC (±30%); PoE (802.3af)
Power Consumption	Basic: 3.4 W (12 VDC); 3.8 W (PoE) Max. (H.265+WDR+ warm light+siren and light active deterrence + intelligence on): 9 W (12 VDC); 10.3 W (PoE)

Environment

Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	≤95%
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Protection	IP67

Structure

Casing	Metal
Product Dimensions	183.1 mm × 99.0 mm × 78.0 mm (7.20" × 3.90" × 3.07") (L × W × H)
Net Weight	695 g (1.53 lb)
Gross Weight	870 g (1.92 lb)

Ordering Information

Type	Model	Description
8MP Camera		2x4MP TiOC Duo Splicing Fixed-focal Bullet WizSense Network Camera
		2x4MP TiOC Duo Splicing Fixed-focal Bullet WizSense Network Camera
Accessories (Optional)	PFA130-E	Junction Box
	PFA157	Pole Mount Bracket
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card
	PFM-321D	12 VDC 1A Power Adapter

Accessories

Optional:



PFA130-E
Junction Box



PFA157
Pole Mount Bracket



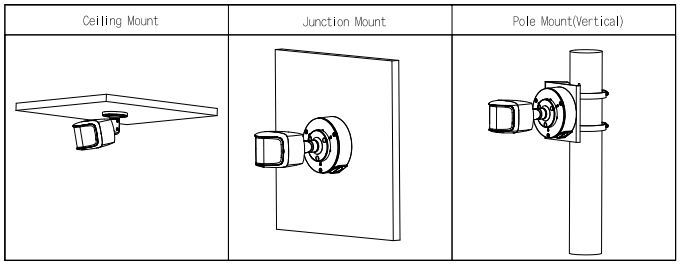
PFM900-E
Integrated
Mount Tester



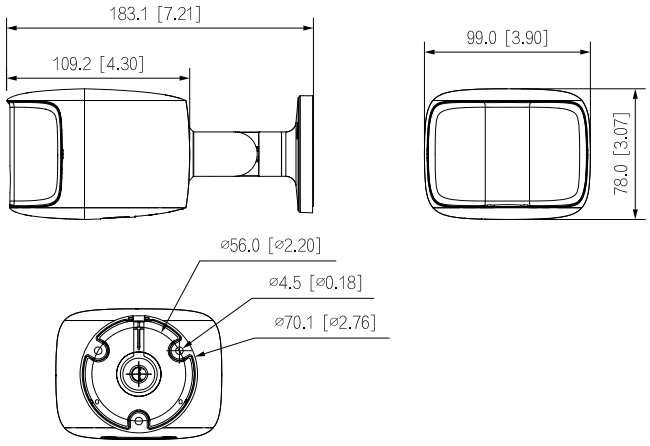
TF-P100
MicroSD
Memory Card



PFM321D
12V DC 1A
Power Adapter



Dimensions (mm[inch])



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