DH-SD3E405DB-GNY-A-PV1

4MP 5x TiOC WizSense Network PTZ Camera



- 1/2.8" 4Megapixel CMOS.
- 5x optical zoom.
- Max. 25/30fps@4M.
- IR distance up to 50 m.
- Warm light illumination distance up to 30 m.
- SMD 3.0.
- Perimeter protection.
- Face detection.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out.
- Built-in Mic and Speaker for Two-way Talk.
- 12 VDC/PoE power supply.
- IP66.
- Sound and light alarm (red and blue lights).



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.

System Overview

The Three-in-One Camera (TiOC) solution combines 24/7 monitoring, active deterrence and real-time alarms with artificial intelligence into one smart, innovative solution. With horizontal and vertical rotation of TiOC PTZ camera,greatly improving the monitoring scope of key targets. For distributors and installers, it not only saves time, but also reduces cost.

Functions

Wide Dynamic Range
The camera produces vivid images, even in high-contrast lighting conditions, by using industry-leading wide dynamic range (WDR) technology. For scenes that quickly alternate between bright and low lighting, WDR adjusts to fully capture both the bright and dark areas of a scene, producing superior quality videos.

Siren And Light Active Deterrence
Dahua siren and light active deterrence network camera supports the white light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention.

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 white 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 white light is off and the IR illuminator is on, which reduces light pollution efficiently.

Two-way Talk
With its built-in high-sensitivity microphone and high-power speaker, the camera realizes two-way talk through the mobile app.

Perimeter Protection
Automatically filters out false alarms caused by animals, rustling leaves, bright lights, and more, and uses secondary recognition during target detection to improve alarm accuracy.

SMD
Empowered by Deep-Learning Algorithms, Dahua SMD filters out motion detection alarms triggered by targets that are not a concern. It quickly recognizes humans and vehicles, triggering alarms when an intrusion occurs.

Protection (IP66, TVS 6000 V)
IP66, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Pixel	4 MP
Max. Resolution	2560 (H) × 1440 (V)
ROM	128 MB
RAM	512 MB
Electronic Shutter Speed	1/1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (IR light on)
Illumination Distance	50 m (164.04 ft) (IR) 30 m (98.43 ft) (Warm light)
Illuminator On/Off Control	Zoom Prio; Manual; Auto; Off
Illuminator Number	2 (IR) 2 (Warm light) 1 (Red light) 1 (Blue light)

Lens

Focal Length	2.7 mm–13.5 mm
Max. Aperture	F1.6–F3.0
Field of View	H: 94.9°–30.1°; V: 51°–17.1°; D: 112.3°–34.6°
Optical Zoom	5×
Focus Control	Auto; semi-auto; manual
Close Focus Distance	1.5 m (4.92 ft)
Iris Control	Fixed

DORI Distance	Detect	Observe	Recognize	Identify
	270 m (885.83 ft)	106.6 m (349.74 ft)	54 m (177.17 ft)	27 m (88.58 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 355° Tilt: –15° to +90°
Manual Control Speed	Pan: 0.1°/s–36°/s Tilt: 0.1°/s–25.8°/s
Preset Speed	Pan: 35.7°/s; Tilt: 27.1°/s
Preset	300
Power-off Memory	Yes
Idle Motion	Preset

Intelligence

IVS (Perimeter Protection)	Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification; linkage tracking
Face Detection	Supports face detection, snapshot, and face enhancement; Supports face cutout: Face, one-inch photo; Capturing strategies include real-time capturing and quality first
Auto Tracking Lite	Yes
SMD	Yes

Active Deterrence

Light Warning	Red and blue light warning Flash duration: 5 s–30 s Flash frequency: high, medium, low
Sound Warning	Offers 11 types of sound alarms, and supports importing up to 10 custom sound alarms. The sound alarm can be set to play 1 to 10 times

Video

Video Compression	H.264H;H.264B;Smart H.265+; H.264;H.265;MJPEG(Sub Stream);Smart H.264+
Streaming Capability	3 streams
Resolution	4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p(1280 × 720); D1 (704 × 576); VGA (640 × 480); CIF (352 × 288)
Video Frame Rate	Main stream: 4M/3M/1080p/1.3M/720p @(1–25/30 fps) Sub stream 1: D1/CIF/VGA@ (1–25/30 fps) Sub stream 2: 720p @(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 96 kbps–14848 kbps H.265: 38 kbps–8960 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	120 dB
HLC	Yes
White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp
Gain Control	Auto; manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Electronic (EIS)
Defog	Electronic
Digital Zoom	16×
Image Rotation	180°
S/N Ratio	≥55 dB

Audio

Audio Compression	G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; PCM

Network

Network Port	RJ-45 (10/100 Base-T)

Network Protocol	FTP;RTMP;IPv6;Bonjour;IPv4;DNS;RTCP;PPPoE;NTP;RTP;802.1x;HTTPS;SNMP;TCP/IP;DDNS;UPnP;NFS;ICMP;UDP;IGMP;SMB;HTTP;SSL;DHCP;SMTP;Qos;RTSP;ARP
Interoperability	CGI;SDK;ONVIF (Profile S&G&T);P2P
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	FTP/SFTP; Micro SD card (512 GB); NAS
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Management Software	DMSS;DSS Pro
Mobile Client	iOS;Android

Certification

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014

Port

Audio Input	1 channel (LINE IN, bare wire,built-in mic (mutually exclusive))
Audio Output	1 channel (LINE OUT,bare wire;built-in speaker (mutually exclusive))
Alarm Linkage	Capture; recording; send email; preset; alarm digital input; audio; warning light
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection
Alarm I/O	1/1
Audio I/O	1/1

Power

Power Supply	12 VDC, 2 A ± 10% PoE+ (802.3at)
Power Consumption	Basic: 4.5 W Max.: 15 W (illuminator + PTZ + speaker + heating glass)

Environment

Operating Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Operating Humidity	≤95%
Protection	IP66, TVS 6000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	142.6 mm × 140 mm × 236.1 mm (5.61" × 5.51" × 9.29")
Net Weight	1.5 kg (3.31 lb)
Gross Weight	2.1 kg (4.63 lb)

*The precision of the presets for PTZ cameras might vary depending on different series. For scenes with high requirements on the precision, contact your local sales representative for assistance with selecting the model.

Ordering Information

Type	Model	Description
4MP WizSense PTZ Camera	DH-SD3E405DB-GNY-A-PV1	4MP 5x TiOC WizSense Network PTZ Camera
	SD3E405DB-GNY-A-PV1	4MP 5x TiOC WizSense Network PTZ Camera
Accessories (Optional)	PFA121	Junction Box
	PFA152-E	Pole Mount Bracket
	DC 12 V/2A	Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Optional:



PFA121
Junction Box



PFA152-E
Pole Mount Bracket



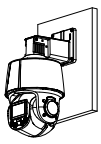
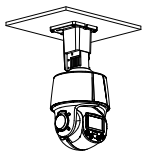
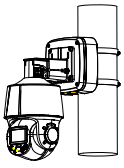
PFM320D
12 VDC 2 A Power Adapter



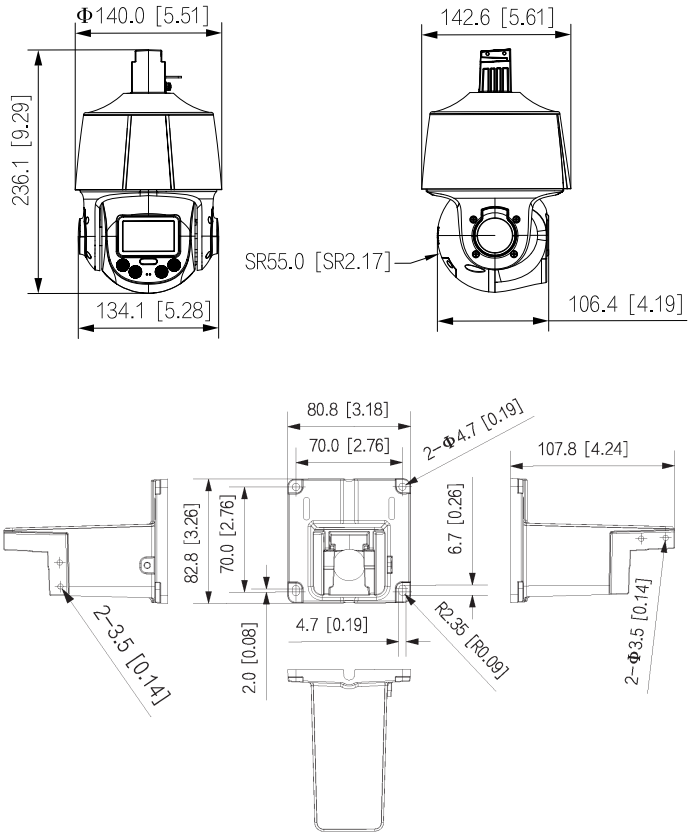
PFM900-E
Integrated Mount Tester



TF-P100
MicroSD Memory Card

Wall Mount	Ceiling Mount
/	/
	
Pole Mount(Vertical)	
PFA121+PFA152-E	
	

Dimensions (mm[inch])



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