DH-SD22404DB-GNY-W

4MP 4x Starlight WizSense Network PTZ Camera

- 1/2.8" STARVIS™ CMOS.
- Powerful 4x optical zoom.
- Max.25/30fps@4M/3M.
- Max 100°/s pan speed.
- Supports face detection.
- Support Wi-Fi.
- IP66, IK10.
- SMD 3.0.
- 6000V lightning-proof.

WizSense

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

With its powerful optical zoom, and accurate pan and tilt capabilities, this series of cameras provides a wide monitoring range and great detail. It displays images in 4 MP resolution at 25/30 fps. These cameras offer smooth control and high-grade protection that enable them to meet the requirements of video surveillance in small-sized scenes.

Functions

Starlight Technology

With advanced image processing technology and optical technology, Dahua Starlight technology can provide clear colorful video in the environment of low illuminance. It widely applies to various environments of low illuminance.

Face Detection

Dahua Face Detection technology can detect the face in the image. With deep learning algorithm, the technology supports detecting, tracking, capturing and selecting the best face image, and then outputs face snapshot.

Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Dahua 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.

PFA Technology

PFA technology has introduced new methods of judgment that ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms that ensure image clarity when zooming and that shorten focus time. This makes the camera highly advanced in its functions, substantially improving the quality of your experience.

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

Lens

Focal Length	2.8 mm–12 mm			
Max. Aperture	F1.6–F3.0			
Field of View	H: 90.3°–29.4°; V: 48.5°–16.6°; D: 105.7°–33.6°			
Optical Zoom	4×			
Focus Control	Auto; semi-auto; manual			
Close Focus Distance	1.5 m (4.92 ft)			
Iris Control	Fixed			
DORI Distance	Detect	Observe	Recognize	Identify
	240 m (787.40 ft)	94.8 m (311.02 ft)	48 m (157.48 ft)	24 m (78.74 ft)

PTZ

Pan/Tilt Range	Pan: 0°–355° Tilt: 0°–90°
Manual Control Speed	Pan: 0.1°/s–100°/s Tilt: 0.1°/s–60°/s
Preset Speed	Pan: 100°/s; Tilt: 60°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Idle Motion	Pattern; Preset; Tour
PTZ Protocol	SD Pelco-P/D(Auto recognition)

Intelligence

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

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@25fps); 1080P (1920 × 1080); 1.3M (1280 × 960); 720P (1280 × 720); D1(704 × 576); CIF(352 × 288); VGA(640 × 480)
Video Frame Rate	Main stream: 4M/3M/1080p/1.3M/720p@(1–25/30 fps) Sub stream 1: D1/VGA/CIF@(1–25/30 fps) Sub stream 2: 720p@(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 2816Kbps – 13056Kbps H.265: 1024Kbps – 7936Kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	DWDR
HLC	Yes
White Balance	Auto; indoor; outdoor; ATW; 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	Yes
Defog	Electronic defog
Digital Zoom	16×
Image Rotation	180°
S/N Ratio	≥ 55 dB

Network

Network Port	RJ-45 (10/100 Base-T)
Wi-Fi	Yes
Wi-Fi–Wireless Standard	802.11n; IEEE802.11b; 802.11g
Wi-Fi–Wireless Frequency Range	2.4GHz
Wi-Fi–Wireless Transmission Rate	150 Mbps
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; SSL; Qos; FTP; UPnP; ICMP; SNMP; IGMP; ARP; RTCP; RTP; PPPoE; RTMP; Bonjour; SAMBA; NFS
Interoperability	ONVIF(Profile S&G&T); P2P; CGI; SDK
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (512 GB); NAS

Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions iOS 10 and later versions.
Management Software	DSS; DMSS
Mobile Client	iOS; Android

Certification

Certifications	CE: CE-LVD: IEC 62368-1/ CE-EMC/EN55032/ EN61000-3-3/EN IEC61000-3-2/EN50130-4/EN55035 FCC: 47 CFR FCC Part15, Subpart B, ANSI C63.4:2014

Port

Alarm Linkage	Capture; preset; tour; pattern; recordings; alarm digital input; send email
Alarm Event	Motion/Tampering detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection; power exception detection

Power

Power Supply	12 VDC, 1 A ± 10%
Power Consumption	Basic: 2.7 W Max.: 4.8 W

Environment

Operating Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Operating Humidity	≤ 95%
Storage Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Storage Humidity	≤ 95%
Protection	IP66, IK10

Structure

Product Dimensions	89 mm × Φ122 mm (3.50" × Φ4.80")
Net Weight	0.5 kg (1.10 lb)
Gross Weight	0.7 kg (1.54 lb)

Ordering Information

Type	Model	Description
4MP PTZ Camera	DH-SD22404DB-GNY-W	4MP 4x Starlight WizSense Network PTZ Camera
Accessories (Optional)	PFA137	Junction Box
	PFB203W	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFA106	Mount Adapter
	PFM321D	12 VDC 1A Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Optional:

PFA137
Junction Box

PFB203W
Wall Mount Bracket

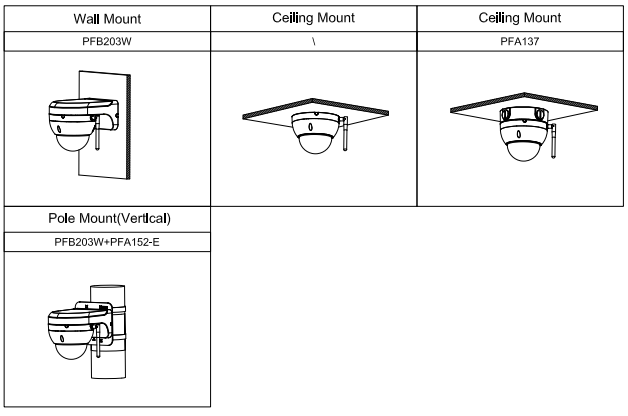
PFA152-E
Pole Mount Bracket

PFA106
Mount Adapter

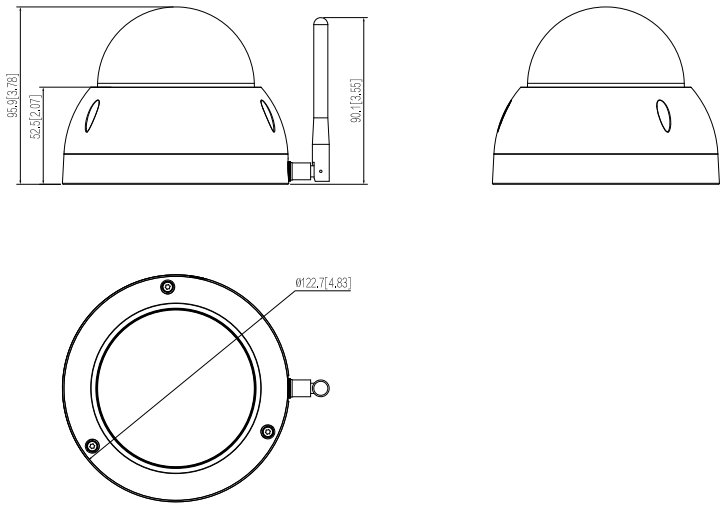
PFM321D
12 VDC 1A Power Adapter

PFM900-E
Integrated Mount Tester

TF-P100
MicroSD Memory Card



Dimensions (mm[inch])



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