DH-SD22204DB-GNY-W

2MP 4x Starlight WizSense Network PTZ Camera

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.

· 1/2.8" CMOS.

· Powerful 4x optical zoom.

· Max. 25/30fps@1080P.

· Max 100°/s pan speed.

· Supports face detection.

· Support Wi-Fi.

· IP66, IK10.

· SMD 3.0.

· 6000V lightning-proof.

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 2 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	2 MP
Max. Resolution	1920 (H) × 1080 (V)
ROM	128 MB
RAM	256 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: 99.1°–31.9°; V: 53.4°–18.0°; D: 117.7°–36.6°
Optical Zoom	4×
Focus Control	Auto; semi-auto; manual
Close Focus Distance	1.5 m (4.92 ft)
Iris Control	Fixed

	Detect	Observe	Recognize	Identify
	165.5 m (542.98 ft)	65.4 m (214.57 ft)	33.1 m (108.60 ft)	16.6 m (54.46 ft)

DORI Distance	*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.

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	1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576); CIF (352 × 288); VGA (640 × 480)
Video Frame Rate	Main stream: 1080p/1.3M/720p@(1–25/30 fps) Sub stream 1: D1/VGA/CIF@(1–25/30 fps) Sub stream 2: 1080p/1.3M/720p@(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 2048 kbps–8192 kbps H.265: 768 kbps–6400 kbps
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
Max Transmission Power	≤20 dBm@2400–2483.5 MHz
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	DMSS; DSS Pro
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)

*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
2MP PTZ Camera	DH-SD22204DB-GNY-W	2MP 4x Starlight WizSense Network PTZ Camera
	SD22204DB-GNY-W	2MP 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
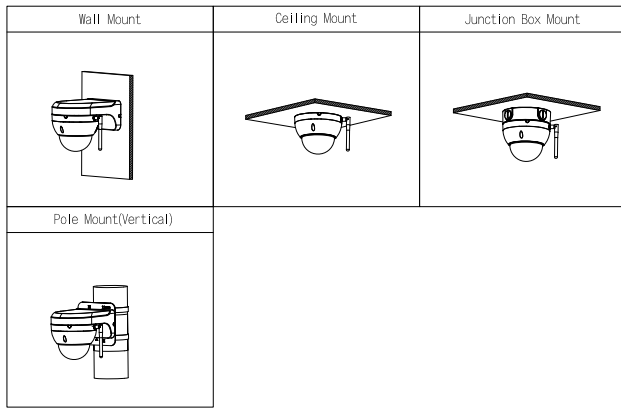Pole Mount
Bracket

PFA106
Mount Adapter

PFM321D
12 VDC 1A Power
Adapter

PFM900-E
Integrated Mount
Tester

TF-P100
MicroSD Memory
Card

Wall Mount	Ceiling Mount	Junction Box Mount
Pole Mount(Vertical)		

Dimensions (mm[inch])

95.9[3.78]
52.5[2.07]
90.13[3.55]

Ø122.7[4.83]