DH-SD50225DB-HNY

2MP 25x Starlight WizSense Network PTZ Camera



- 1/2.8" 2Megapixel CMOS.
- Powerful 25x optical zoom.
- Max. 25/30fps@2M.
- Deep-learning-based perimeter protection.
- SMD.
- PoE+.
- IP67, IK10.
- Face Detection.



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, the PTZ camera provides an all-in-one solution for large-scale monitoring. It harnesses the latest starlight technology, allowing it to produce highly detailed images even in low light conditions. The camera offers smooth control and high-grade protection that enable it to meet the requirements of video surveillance in small and medium-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.

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.

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.

IVS

With advanced video algorithm, Dahua IVS technology supports intelligent functions, such as tripwire and intrusion.

Protection (IP67, TVS 6000 V)

IP67, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

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.

Technical Specification

Camera

Image Sensor	1/2.8"CMOS
Pixel	2 MP
Max. Resolution	1920 (H) × 1080 (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	4.8 mm–120 mm
Max. Aperture	F1.6–F3.5
Field of View	H: 58.5°–2.8°; V: 33.2°–1.5°; D: 67.5°–3.2°
Optical Zoom	25×
Focus Control	Auto; semi-auto; manual
Close Focus Distance	0.1 m–1.0 m (0.34 ft–3.28 ft)
Iris Control	Auto; manual

DORI Distance	Detect	Observe	Recognize	Identify
	1655.2 m (5430.36 ft)	653.8 m (2145.00 ft)	331.0 m (1,086.07 ft)	165.5m (543.04 ft)

PTZ

Pan/Tilt Range	Pan: 0°–360° endless Tilt: 0° to +90°, auto flip 180
Manual Control Speed	Pan: 0.1°/s–350°/s Tilt: 0.1°/s–250°/s
Preset Speed	Pan: 500°/s; Tilt: 500°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Pattern; Preset; Scan; Tour
PTZ Protocol	DH-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 bounding box, capturing snapshots, and enhancing face images. Face cutout is also offered, where you can cutout one face at a time and customize the size to be a one-inch photo. The supported methods for capturing snapshots are 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	120dB
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°
Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view; multiple colors available
S/N Ratio	≥ 55 dB

Audio

Audio Compression	G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G723; PCM

Network

Network Port	RJ-45 (10/100 Base-T)
Network Protocol	TCP; FTP; RTMP; IPv6;Bonjour; IPv4; DNS; RTCP; PPPoE; NTP; RTP; 802.1x; HTTPS; SNMP; TCP/IP; DDNS; UPnP; NFS; ICMP; UDP; IGMP; IP Filter; SMB; HTTP; SSL; DHCP; SMTP; SNMPv1/v2c/v3(MIB-2); Qos; RTSP; ARP
Interoperability	CGI; Dahua SDK; API; SDK; ONVIF(Profile S&G&T)
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	DMSS; FTP; Micro SD card (512 GB); NAS
Browser	IE 7 and later versions Chrome 45 and later versions Firefox 52 ESR and earlier versions Safari

Management Software	DMSS; DSS Pro
Mobile Client	iPhone; iPad; iOS; Android
Certification	CE-EMC: EN 55032; EN 61000-3-3; EN 61000-3-2; EN 50130-4; EN 55035 CE-LVD: EN 62368-1 FCC: 47 CFR FCC Part15, Subpart B, NSI C63.4

Port

Audio Input	1 channel
Audio Output	1 channel
Alarm Linkage	Capture; preset; tour; pattern; recording; alarm digital input; send email
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card status detection; memory space detection
Alarm I/O	2/1
Audio I/O	1/1

Power

Power Supply	24 VDC/2.5 A ± 25% PoE+ (802.3at)
Power Consumption	Basic: 11.6 W Max.: 15.8 W (AI functions)

Environment

Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	≤ 95%
Protection	IP67, IK10,TVS 6000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	253.0 mm × Φ186.2 mm (9.96" × Φ7.33")
Net Weight	2.5 kg (5.51 lb)
Gross Weight	4.5 kg (9.92 lb)

Ordering Information

Type	Model	Description
2MP PTZ Camera	DH-SD50225DB-HNY	2MP 25x Starlight WizSense Network PTZ Camera, WDR, PAL
	SD50225DB-HNY	2MP 25x Starlight WizSense Network PTZ Camera, WDR, PAL
Accessories	PFB300S	Wall Mount Bracket
	PFA110	Mount Adapter Bracket
	DC 24 V/2.5 A	Power Adapter
	PFA140	Power Box
	PFB300C	Ceiling Mount Bracket
	PFA120	Junction Box
	PFA150	Pole Mount Bracket
	PFA151	Corner Mount Bracket
	PFB303S	Parapet Mount Bracket
	PFB301S-E	Plane Mount Bracket
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Included:



PFB300S
Wall Mount Bracket



PFA110
Mount Adapter Bracket



DC24V/2.5A
Power Adapter

Optional:



PFA140
Power Box



PFB300C
Ceiling Mount Bracket



PFA120
Ceiling Mount Bracket



PFA150
Pole Mount Bracket



PFA151
Corner Mount Bracket



PFB303S
Parapet Mount Bracket



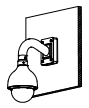
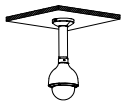
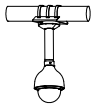
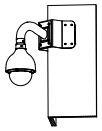
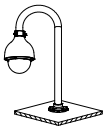
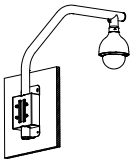
PFB301S-E
Plane Mount Bracket



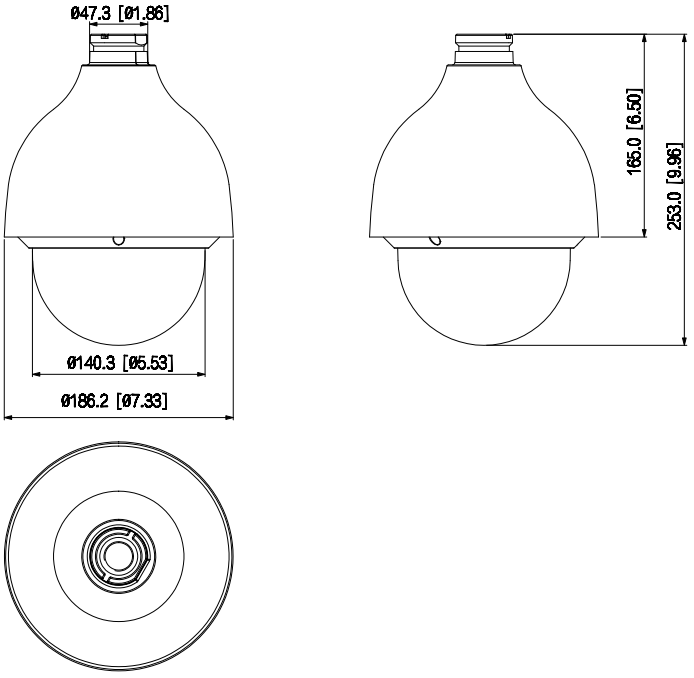
PFM900-E
Integrated Mount Tester



TF-P100
MicroSD Memory Card

Wall Mount	Ceiling Mount	Ceiling Mount
PFA110+PFB300S+PFA120	PFA110+PFB300C	PFA110+PFB301C
		
Pole Mount(Vertical)	**Pole Mount(Horizontal)**	**Corner Mount**
PFA110+PFB300S+PFA150	PFA110+PFB300C+PFA150	PFA110+PFB300S+PFA151
		
Plane Mount	**Parapet Mount**	
PFB301S-E	PFA110+PFB303S	
		

Dimensions (mm[inch])



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