DH-SD52C225DB-HNY

2MP 25 Starlight Non Compensation Light NETWORK PTZ CAMERA

- 1/2.8" 2Megapixel STARVIS™ CMOS.
- 25x optical zoom.
- Starlight technology.
- Max. 25/30 fps@2MP.
- Perimeter protection.
- Face detection.
- SMD 3.0
- IK10.

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

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.

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.

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.

Protection (±25%, 6 kV)

Designed with ±25% input voltage tolerance, the camera is suitable for even the most unstable outdoor conditions. Its 6 kV lightning rating ensures protection against lightning for both the camera and its structure.

SMD 3.0

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.

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	0.1m–1.5m (0.33 ft–4.92 ft)			
Iris Control	Auto; manual			
DORI Distance	Detect	Observe	Recognize	Identify
	1,655.2 m (5,430.44 ft)	653.8 m (2,145.01 ft)	331.0 m (1,085.96 ft)	165.5 m (542.98 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless; Tilt: 0° to +90°, auto flip 180° When the vertical field of view is between 0° and 7°, the image might present different degrees of ghosting.
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

Intelligence

IVS (Perimeter Protection)	Supports 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, capturing snapshots, enhancing face images, and 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	SMD 3.0
Auto Patrol	It triggers the IVS rule when a target is detected and makes the camera link with the PTZ to rotate to the position of the target and patrol based on its presets.

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 (704×576/704x480); VGA (640x480) CIF(352×288/352x240)
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
Day/Night	Auto (ICR); Color; B/W
BLC	Yes
WDR	Yes
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	PCM; G.711A; G.711MU; G.726; MPEG2-Layer2; G.722.1

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	SDK; ONVIF (Profile S&G&T); CGI
Streaming Method	Unicast; Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (512 GB); FTP/SFTP; NAS
Browser	Web 5.0: 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

Port

Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT,bare wire)
Alarm Linkage	Capture; recoding; send email; preset; tour; pattern; alarm digital output
Alarm Event	Motion/Tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection
Alarm I/O	2/1
Audio I/O	1/1

Power

Power Supply	24 VDC/2.5 A ± 25% (included) PoE+ (802.3at)
Power Consumption	24 VDC: Basic: 13 W Max: 16 W (PTZ) PoE+ (802.3at): Basic: 13 W Max: 15 W (PTZ)

Environment

Operating Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Operating Humidity	≤ 95%
Protection	IK10; 6000V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	176.6 mm × Φ198.0 mm (6.95" × Φ7.80")
Net Weight	2.2 kg (4.85 lb)
Gross Weight	3.7 kg (8.16 lb)

Ordering Information

Type	Model	Description
2MP WizSense PTZ Camera	DH-SD52C225DB-HNY	2MP 25x In-ceiling WizSense Network PTZ Camera
Accessories	DC 24 V/2.5 A	Power Adapter
	TF-P100	MicroSD Memory Card
	PFM900-E	Integrated Mount Tester

Accessories

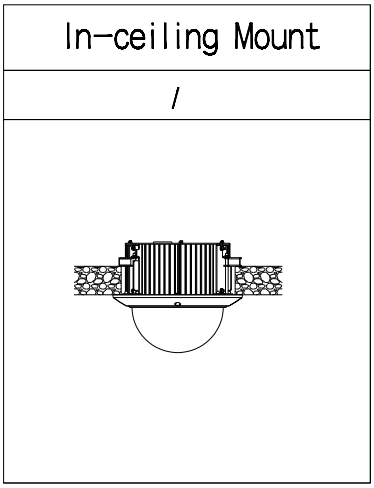
Included:

DC24V/2.5A
Power Adapter

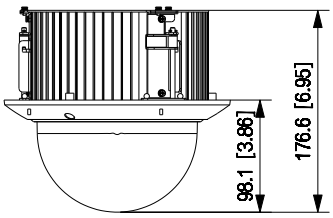
Optional:

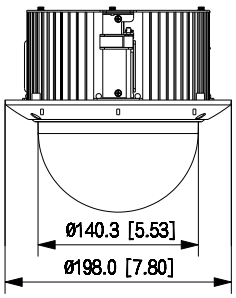
TF-P100
MicroSD
Memory Card

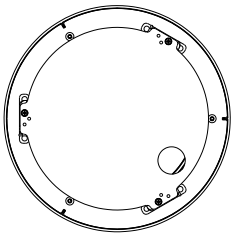
PFM900-E
Integrated
Mount Tester



Dimensions (mm[inch])







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