

# DH-SD6CE225DB-HNY

## 2MP 25x Startlight IR Network PTZ Camera



**Wiz Sense**

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 long distance video surveillance of outdoor scenes. Together with infrared illumination and Starlight Technology, the camera is a great solution for dark, low light conditions. The series combines a day and night mechanical IR cut filter to produce high quality images in variable lighting conditions during the day.

### 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.

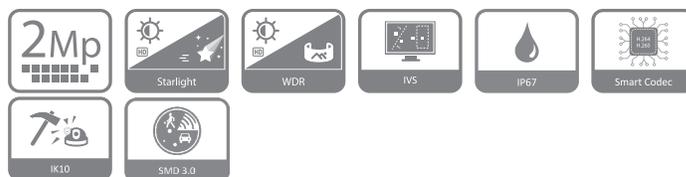
#### PFA Technology

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.

- Powerful 25x optical zoom.
- Starlight Technology.
- Max. 25/30fps@2MP.
- IR distance up to 250 m.
- Deep-learning-based perimeter protection.
- SMD 3.0.
- PoE+.
- IP67, IK10.



#### IVS

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

#### Protection (IP67, TVS 8000 V)

IP67, TVS 8000 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.

#### 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 0 lux (IR light)
Illumination Distance	250 m (656.17 ft) (IR)
Illuminator Number	6 (IR)

**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)	165.5 m (543.04 ft)
	*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° to 360° endless Tilt: –20° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°/s–200°/s Tilt: 0.1°/s–120°/s
Preset Speed	Pan: 300°/s; Tilt: 200°/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	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); 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
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**Network**

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

Analog Output	1 channel (CVBS output, BNC)
RS-485	1 (baud rate: 1200 bps–9600 bps)
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	7/2
Audio I/O	1/1

**Power**

Power Supply	24 VDC/2.5 A ± 25% PoE+ (802.3at)
Power Consumption	Basic: 14.0W Max.: 25.2 W (illuminator + AI functions)

**Environment**

Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Humidity	≤ 95%
Protection	IP67, IK10, TVS 8000 V lightning proof; surge protection; voltage transient protection

**Structure**

Product Dimensions	337.4 mm × Φ209.1 mm (13.28" × Φ8.23")
Net Weight	5.8 kg (12.79 lb)
Gross Weight	9.4 kg (20.72 lb)

**Ordering Information**

Type	Model	Description
2MP PTZ Camera	DH-SD6CE225DB-HNY	2MP 25x Starlight IR PTZ Network Camera, WDR, PAL
	SD6CE225DB-HNY	2MP 25x Starlight IR PTZ Network Camera, WDR, PAL
Accessories	PFB305W	Wall Mount Bracket
	DC 24 V/2.5 A	Power Adapter
	PFA111	Mount 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:**



PFB305W  
Wall Mount Bracket



DC24V/2.5A  
Power Adapter

**Optional:**



PFA111  
Mount 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

Wall Mount PFB305W+PFA120	Ceiling Mount PFA111+PFB300C	Ceiling Mount PFA111+PFB301C
Pole Mount(Vertical) PFB305W+PFA150	Corner Mount PFB305W+PFA151	Pole Mount(Horizontal) PFA111+PFB300C+PFA150
Plane Mount PFB301S-E	Parapet Mount PFA111+PFB303S	

**Dimensions (mm[inch])**

