

# DH-SD6CE245GB-HNR

2MP 45x Starlight 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

Unique and elegant, the black semicircular sphere discreetly monitors from a distance without drawing undue attention to itself. It has a powerful optical zoom, and accurate pan, tilt and zoom capabilities, providing 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, and True WDR for locations with direct sunlight and glare.

## 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.

### Perimeter Protection

Automatically filters out false alarms caused by animals, rustling leaves, bright lights, and more, and uses secondary recognition during target detection to improve alarm accuracy.

### Face Detection

Supports 6 attributes and 8 expressions: Gender, age, glasses, face mask, beard and expressions (anger, sadness, disgust, fear, surprise, calm, happiness, and confusion). It also supports face cutout settings: Face, and single inch photo. Three snapshot methods are also featured: Real-time snapshot, priority snapshot, and quality priority.

- 1/2.8" 2Megapixel STARVIS™ CMOS.
- 45x optical zoom.
- Starlight technology.
- Max. 25/30fps@1080P.
- IR distance up to 250 m.
- Auto-tracking 3.0.
- Perimeter protection.
- Face detection.
- SMD 4.0.
- Quick Pick.
- IP67, IK10.



### Auto-tracking

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

### Protection (IP67, TVS 6000 V)

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

### SMD 4.0

Dahua Smart Motion Detection technology works with intelligent algorithms to classify targets that trigger motion detection alarms. It filters out objects that are not targets, such as small and large animals, to avoid triggering false alarms. With an AI NVR, Quick Pick technology becomes available, allowing you to easily search for and pick out human and vehicle targets from SMD event videos, prioritizing the highest matches.

### Technical Specification

#### Camera

Image Sensor	1/2.8" CMOS
Pixel	2 MP
Max. Resolution	1920 (H) × 1080 (V)
ROM	4 GB
RAM	1 GB
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@F1.6 (IR on)
Illumination Distance	250 m (820.21 ft)
Illuminator On/Off Control	Zoom Prio; Manual; Smart IR; Off
Illuminator Number	6 (IR)

#### Lens

Focal Length	3.95 mm–177.75 mm			
Max. Aperture	F1.6–F4.95			
Field of View	H: 65.7°–1.9°V: 39.4°–1.1°D: 73.1°–2.1°			
Optical Zoom	45×			
Focus Control	Auto/Semi-Auto/Manual			
Close Focus Distance	0.1 m–1 m (0.33 ft–3.28 ft)			
Iris Control	Auto/Manual			
DORI Distance	Detect	Observe	Recognize	Identify
	2451.7 m (8043.64 ft)	972.9 m (3191.93 ft)	490.3 m (1608.60 ft)	245.2 m (804.46 ft)

#### PTZ

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: –20° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°/s–260°/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; climbing fences; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification; linkage tracking
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#### Face Detection

Supports face detection, optimization, tracking, capturing pictures, uploading high-quality face snapshots, and face enhancement; Supports attributes extraction. 6 attributes and 8 expressions: Gender, age, glasses, expressions (angry, sad, hate, scary, surprise, calm, happy and confused), mask, mustache; Supports face cutout: Face, one-inch photo. Capturing strategies include real-time capturing, optimization, and quality first.

#### Auto Tracking

Yes

#### SMD

Yes

#### Quick Pick

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); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576); VGA (640 × 480); CIF (352 × 288)

#### 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: 720p@ (1–25/30 fps)

#### Bit Rate Control

CBR/VBR

#### Video Bit Rate

H264: 64 kbps–10496 kbps  
H265: 25 kbps–6400 kbps

#### Day/Night

Auto (ICR)/Color/B/W

#### BLC

Yes

#### WDR

120 dB

#### HLC

Yes

#### White Balance

Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/Natural light/Street lamp

#### Gain Control

Auto/Manual

#### Noise Reduction

2D/3D

#### 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

#### S/N Ratio

≥ 55 dB

#### Audio

#### Audio Compression

PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; G723

#### Network

#### Network Port

1 × 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; HTTP; SSL; DHCP; SMTP; Qos; RTSP; ARP
Interoperability	CGI; SDK; ONVIF (Profile S&G&T); P2P
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (Up to 512 GB); FTP; 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: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014
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**Port**

Analog Output	1 channel (CVBS output, BNC)
RS-485	1(Bit range: 1200 bps–9600 bps)
Audio Input	1 channel
Audio Output	1 channel
Alarm Linkage	Capture; recording; 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	7/2
Audio I/O	1/1

**Power**

Power Supply	24 VDC, 2.5 A ± 25% PoE+ (802.3at)
Power Consumption	Basic: 13 W Max: 25 W

**Environment**

Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Operating Humidity	≤ 95% (RH)
Protection	IP67; IK10; TVS 8000V lightning proof; surge protection; voltage transient protection

**Structure**

Product Dimensions	337.4 mm × Φ209 mm (13.28" × Φ8.23")
Net Weight	5.9 kg (13.00 lb)
Gross Weight	9.6 kg (21.16 lb)

**Ordering Information**

Type	Model	Description
2MP WizSense PTZ Camera	DH-SD6CE245GB-HNR	2MP 45x Starlight IR WizSense Network PTZ Camera
	SD6CE245GB-HNR	2MP 45x Starlight IR WizSense Network PTZ Camera
Accessories	PFB305W	Wall Mount Bracket
	DC 24 V/2.5 A	Power Adapter
	PFA111	Mount Adapter
	PFA120	Mount Adapter
	PFB300C	Ceiling Mount Bracket
	PFA150	Pole Mount Bracket
	PFA151	Corner Mount Bracket
	PFB301C	Ceiling Mount Bracket
	PFB301S-E	Plane Mount Bracket
	PFB303S	Parapet Mount Bracket

**Accessories**

Included:



PFB305W  
Wall Mount Bracket



DC 24 V/2.5 A  
Power Adapter

Optional:



PFA111  
Mount Adapter



PFA120  
Water-proof  
Junction Box



PFB300C  
Ceiling Mount  
Bracket



PFA150  
Pole Mount  
Bracket



PFA151  
Corner Mount  
Bracket



PFB301C  
Ceiling Mount  
Bracket

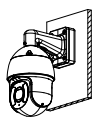
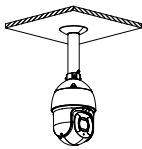
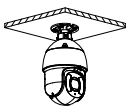

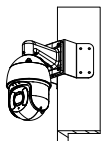
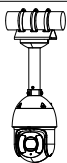
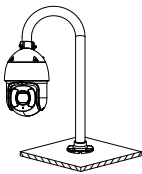
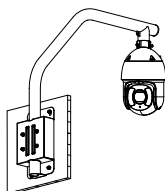


PFB301S-E  
Plane Mount  
Bracket



PFB303S  
Parapet Mount  
Bracket

**Installation**

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

**Dimensions (mm [inch])**

