DH-SD6AL445GB-HNV

4MP 45x Starlight Laser Network PTZ Camera



- 1/2.8" 4Megapixel STARVIS™ CMOS.
- 45x optical zoom.
- Starlight technology.
- Max. 25/30 fps@2560 × 1440.
- The laser illumination distance up to 550 m.
- Auto tracking 3.0.
- Perimeter protection.
- Face detection.
- Video Metadata.
- SMD 4.0.
- IP67.



Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, NVR, PTZ, XVR, Thermal and software platform which adopts industry-leading deep learning algorithms. Focusing on customer's requirements, WizMind provides precise, reliable and comprehensive AI solutions for industry verticals.

System Overview

With its powerful optical zoom and accurate pan, 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, and True WDR for locations with direct sunlight and glare.

Functions

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.

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.

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.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Pixel	4 MP
Max. Resolution	2560 (H) × 1440 (V)
ROM	4 GB
RAM	1 GB
Electronic Shutter Speed	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/laser light on)
Illumination Distance	550 m (1804.46 ft)
Illuminator On/Off Control	Zoom prio; Manual; Auto; Off
Illuminator Number	2 (IR); 1 (laser)
Wiper	Wiper

Lens

Focal Length	3.95 mm–177.7 mm			
Max. Aperture	F1.6–F4.95			
Field of View	H: 63.2°–1.8°; V: 37.6°–1.1°; D: 70.8°–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; iris prio			
DORI Distance	Detect	Observe	Recognize	Identify
	3,555 m (11,663.39 ft)	1,404.2 m (4,606.96 ft)	711 m (2,332.68 ft)	355.5 m (1,166.34 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: 240°/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

Video Metadata	Motor vehicle, non-motor vehicle, face, and human body detection; optimization; capturing pictures; uploading high-quality face snapshots. Attribute extraction of motor vehicle is also supported, where 10 attributes can be detected
IVS (Perimeter Protection)	Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; human alarm classification; linkage tracking
Face Detection	Supports face detection, optimization, capturing pictures, uploading high-quality face snapshots and enhancing face images. Attribute Extraction is also supported, where 6 attributes and 8 expressions can be detected. 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, quality first, and selecting a preferred image among a group of snapshots
Auto Tracking	Yes
SMD	SMD4.0
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	4M (2560 × 1440); 3M (2048 × 1536); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Main stream: 4M/3M/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: 96 kbps–14848 kbps H.265: 38 kbps–8960 kbps
Day/Night	Color; B/W; Auto; Electronic
BLC	Yes
WDR	120 dB
HLC	Yes
White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp
Gain Control	Auto; manual; gain prio
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	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; G722.1; G729; G723

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; HTTP; SSL; DHCP; SMTP; Qos; RTSP; ARP
Interoperability	CGI; SDK; ONVIF (Profile S&G&T)
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (512 GB); FTP/SFTP; NAS
Browser	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

Certification

Certifications	CE: CN211FB1 001 and 4789976478-2.5-1 FCC: 4790130386-2

Port

Alarm I/O	7/2
Audio I/O	1/1
RS-485	1 (baud rate: 1200 bps–115200 bps)
Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT,bare wire)
Alarm Linkage	Capture; Recording; send email; preset; tour; pattern; alarm digital input
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection

Power

Power Supply	36 VDC, 2.23 A ± 25% HI-PoE
Power Consumption	Basic: 15 W Max: 45 W (illuminator+PTZ)

Environment

Operating Temperature	–40 °C to +70 °C (–40 °F to +158 °F)
Operating Humidity	≤ 95%
Protection	TVS 6000 V lightning proof; surge protecton; voltage transient protecton; IP67

Structure

Product Dimensions	382 mm × Φ239.8 mm (15.04" × Φ9.44")
Net Weight	6.8 kg (14.99 lb)
Gross Weight	9.2 kg (20.28 lb)

Ordering Information

Type	Model	Description
SD6AL Series	DH-SD6AL445GB-HNV	4MP 45x Starlight Laser Network PTZ Camera
Accessories	DC36V/2.23A	Power Adapter
	PFA111	Mount adapter
	PFB303W	Bracket
	PFB300C	Ceiling Mount
	PFA150	Vertical pole mount
	PFA151+PFB303W	Corner Mount
	PFA150+DH-PFB300C	Horizontal Pole Mount
	PFB301C	Ceiling Mount
	PFB301S-E	Plane Mount
	PFB303S	Parapet Mount

Accessories

Included:



DC36V/2.23A
Power Adapter



PFA111
Mount adapter



PFB303W
Bracket

Optional:



PFB300C
Ceiling Mount
Bracket



PFA150
Pole Mount
Bracket



PFA151+PFB303W
Corner Mount
Bracket



PFA150+PFB300C
Horizontal Pole
Mount



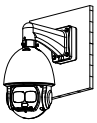
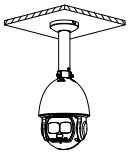
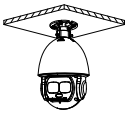
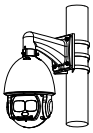
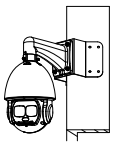
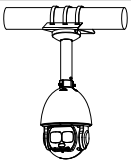
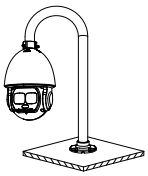
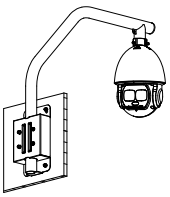
PFB301C
Ceiling Mount



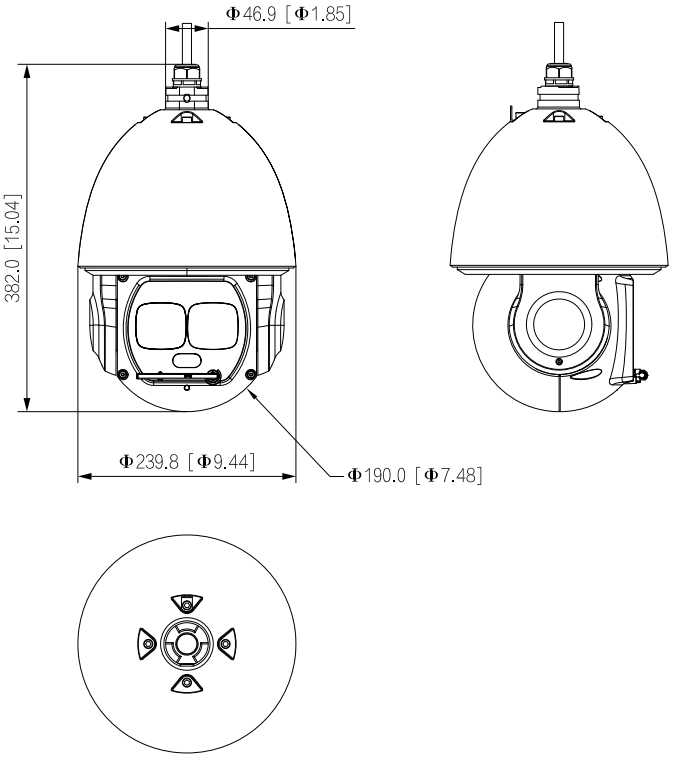
PFB301S-E
Plane Mount



PFB303S
Parapet Mount

Wall Mount	Ceiling Mount	Ceiling Mount
PFA111+PFB303W+PFA120	PFA111+PFB300C	PFA111+PFB301C
		
Pole Mount(Vertical)	**Corner Mount**	**Pole Mount(Horizontal)**
PFA111+PFB303W+PFA150	PFA111+PFB303W+PFA151	PFA111+PFB300C+PFA150
		
Plane Mount	**Parapet Mount**	
PFB301S-E	PFA111+PFB303S	
		

Dimensions (mm[inch])



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