DH-EPT9A1445-HNR-F

4MP 45x Starlight IR Explosion-proof Camera



- 1/2.8" 4Megapixel STARVIS™ CMOS
- Powerful 45x optical zoom
- 316L stainless steel housing
- Starlight technology
- H.265/H.264 Triple-stream Encoding
- Max.25/30fps@1440P
- IP68
- Wiper



Series Overview

Designed with stainless steel, cameras in the explosion-proof series are highly durable, working stably in environments with dust and flammable and explosive gas. These cameras are explosion proof, producing smooth, high-definition videos through their integrated system. The series received ATEX and IECEx certification, and is highly suitable for use in the petroleum industry, petrochemical industry and more.

Functions

Starlight Technology

Dahua Starlight technology utilizes advanced image processing and optical technologies to deliver clear videos, even in low-lighting environments. This technology is extensively employed across a range of settings that have inadequate lighting.

Protection (IP68, TVS 6000 V)

IP68, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

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	0.005 lux@F1.5 (Color, 30 IRE); 0.0005 lux@F1.5 (B/W, 30 IRE); 0 lux (illuminator on)
Illumination Distance	100 m (328.08 ft) (IR)
Illuminator On/Off Control	Zoom Prio; Manual; Auto; Off
Illuminator Number	4 (IR light)
Wiper	Wiper

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–3 m (0.33 ft–9.84 ft)
Iris Control	Auto; manual; iris prio

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	3.95 mm–177.75 mm	3172 m (10406.82 ft)	1252.9 m (4110.56 ft)	634.4 m (2081.36 ft)	317.2 m (1040.68 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: –90° to +90°
Manual Control Speed	Pan: 0.1°/s–40°/s Tilt: 0.1°/s–40°/s
Preset Speed	Pan: 0.1°/s–40.5°/s Tilt: 0.1°/s–44.1°/s
Preset	300
Tour	8
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Preset;Pattern;Tour;Scan
PTZ Protocol	DH-SD Pelco-P/D

Intelligence

Video Metadata	Supports detection of motor vehicles, non-motor vehicles, faces and human bodies, optimization, capturing pictures, and uploading high-quality face snapshots. It extracts attributes from motor vehicles and non-motors, detecting up to 10 attributes for motor vehicles and 6 for non-motor vehicles. It also extracts attributes from human faces and bodies, detecting up to 6 attributes for faces, and 8 for bodies.
IVS (Perimeter Protection)	Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; human alarm classification
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.
SMD	SMD 4.0
Quick Pick	Yes

Active Deterrence

Sound Warning	Offers 11 sound alarms and supports importing custom sound alarms. Sound can be set from 0%–100%. Play times can be set from 1-10.

Video

Video Compression	Smart H.265+;H.265;Smart H.264+;H.264B;H.264M;H.264H;MJPEG(Sub Stream 1)
Streaming Capability	3 streams
Resolution	4M (2560 × 1440) ;3M (2048 × 1536); 1080p (1920 × 1080); 1.3M(1280 × 960);720p (1280 × 720); D1 (704 × 576/704 × 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/CIF@ (1–25/30 fps) Sub stream 2: 1080p/1.3M/720p/CIF @(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 96 kbps–13,568 kbps H265: 38 kbps–8,192 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; gain prio
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Electronic 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

Network

Network Port	Registered jack (RJ) (10/100 Base-T)
Network Protocol	HTTP;HTTPS;TCP/IP;IPv4;RTSP;UDP;SMTP;NTP;DHCP;DNS;DDNS;IPv6;802.1x;SSL;QoS;FTP;UPnP;ICMP;SNMP;IGMP;ARP;RTCP;RTP;PPPoE;RTMP;Bonjour;NFS
Interoperability	ONVIF (Profile S & Profile G & Profile T);CGI;SDK
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 52 and later versions; Safari 10 and later versions
Management Software	DMSS;DSS Pro
Mobile Client	iOS;Android

Certification

Certifications	ATEX: EN 60079-0/EN 60079-1/EN 60079-31 IECEx: IEC 60079-0/IEC 60079-1/IEC 60079-31

Port

RS-485	1 (baud rate: 1200 bps–9600 bps)
Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT,bare wire)
Alarm Input	2 (on-off value input: 0–5 VDC)
Alarm Output	1 channel
Alarm Linkage	Recording; send email; preset; tour; pattern; alarm digital output; audio
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection
Optical Fiber	100 M single fiber port

Power

Power Supply	100–240 VAC, 1 A, 50/60 Hz
Power Consumption	Basic: 15 W; Max: 60 W (illuminator + heater + PTZ + wiper)

Environment

Operating Temperature	-40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	≤95%
Protection	IP66;IP68;TVS 6000 V lightning proof; surge protection; voltage transient protection
Anti-corrosion Level	Basic Protection *The products are designed for general use and are applicable even in areas with no specific requirements for anti-corrosion protection.

Structure

Casing Material	SUS316L
Product Dimensions	334.1 mm × 303 mm × 426 mm (13.15" × 11.93" × 16.77")
Net Weight	23.5 kg (51.81 lb)
Gross Weight	46.4 kg (102.30 lb)

Ordering Information

Type	Model	Description
Explosion Proof Pan Tilt Camera	DH-EPT9A1445-HNR-F	4MP 45x Starlight IR Explosion-proof Camera
Accessories (Optional)	DH-SDPJ008	Wall Mount Bracket-DH-SDPJ008-SUS 316L
	ZAEX02	Explosion-proof Cable Gland
	ZANXG-1.5	Explosion-proof flexible conduit-M25-1500-316L
	CZ300	Explosion-proof Control Box

Accessories

Optional:



CZ300
Explosion-proof Control Box



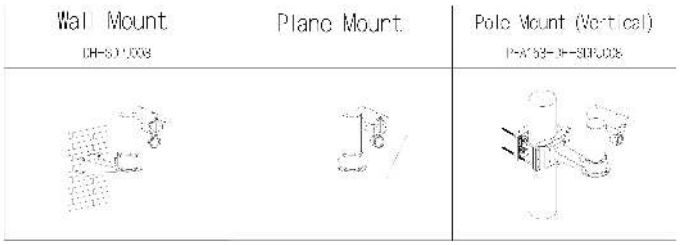
DH-SDPJ008
Wall Mount Bracket-DH-SDPJ008-SUS 316L



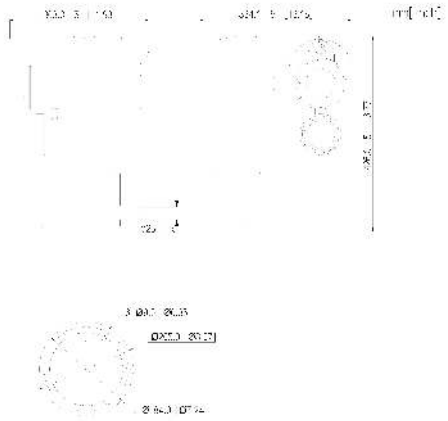
ZAEX02
Explosion-proof Cable Gland



ZANXG-1.5
Explosion-proof flexible conduit-M25-1500-316L



Dimensions (mm[inch])



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