DH-SD6C3425-HNY-A1

6-Inch 400W Easy Smart IR Illumination POE Network PTZ Camera

· 1/2.8" CMOS.

· 25x optical zoom.

· Starlight technology.

· Max. 25/30fps@4M.

· IR distance up to 150 m.

· Perimeter protection.

· Face detection.

· SMD 3.0.

· IP66.

Functions

Starlight Technology

Dahua Starlight employs cutting-edge imaging technology and optical technology to maintain clear and transparent image effects even in darker scenes, widely meeting the consumption needs of various low-illumination environments.

PFA Technology

PFA Technology provides a method to achieve consistent clarity throughout the entire module zoom process. When the device performs zoom, it analyzes the variation pattern of AF statistical values under the object distance curve. By switching between different object distances within the depth of focus and combining the convexity and concavity of statistical values, it performs accurate object distance switching, thereby ensuring clarity throughout the zoom process.

WDR

Dahua utilizes the industry-leading WDR (Wide Dynamic Range) technology, enabling the capture of clear details even under extremely intense brightness contrast conditions. Whether in high-brightness environments with strong light sources, backlit scenes, or areas with both bright and dark zones, Dahua delivers sharp video quality.

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.

IVS

Dahua IVS technology supports intelligent detection such as tripwire and intrusion through advanced video algorithms.

Smart H.265+ & Smart H.264+

Dahua Smart Codec technology utilizes an advanced Scene Self-Adaptation (SSA) bit rate control algorithm, achieving higher encoding efficiency than (H.265 & H.264), Delivering high-mass video while significantly reducing storage and transmission costs.

Protection (IP66, TVS 6000 V)

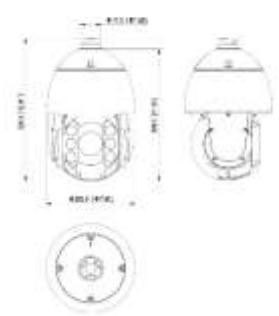IP66, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

Technical Specification	
Camera	
Image Sensor	1/2.8" CMOS
Pixel	4 MP
Max. Resolution	2560 (H) × 1440 (V)
Electronic Shutter Speed	1/1 s–1/30,000 s
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (IR light on)
Illumination Distance	150 m (IR)
Illuminator On/Off Control	Zoom Prio; Manual; Auto; Off
Illuminator Number	6 (IR)
Illuminator Type	IR
Lens	
Focal Length	5mm ~ 125mm
Max. Aperture	F1.6-F3.6
Field of View	H: 51.9°-3.0°; V: 39.7°-2.2°; D: 63.1°-3.7°
Optical Zoom	25x
Focus Control	Auto; semi-auto; manual
Close Focus Distance	0.5m~5m
Zoom Speed	3.5 s
PTZ	
Pan/Tilt Range	Pan: 0° to 360° endless Tilt: −20° to +90°, auto flip 180°
Manual Control Speed	Pan: 0°/s–200°/s Tilt: 0°/s–100°/s
Preset Speed	Pan: 0°/s–200°/s Tilt: 0°/s–100°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5

Scan	5
Power-off Memory	Yes
Idle Motion	Preset;Pattern;Tour;Scan
Scheduled Task	Preset;Pattern;Tour;Scan
Preset Video Freeze	Yes
3D Positioning	Yes
Visible Range	Yes
Intelligence	
Intelligence category	Easy 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
Face Detection	Supports face detection; supports preference selection; supports capture; supports face enhancement; supports face cutout zone settings: face, single portrait; supports real-time snapshot, supports two capture strategies: quality prioritization.
Video	
Video Compression	Smart H.265+;H.265;Smart H.264+;H.264;H.264B;H.264H;MJPEG(Sub Stream 1)
Resolution	6144Kbps
Video Frame Rate	Main stream: 4M/1080p/960p/720p@(1–25/30 fps) Sub stream 1: D1/VGA/CIF@(1–25/30 fps) Sub stream 2: 1080p/960p/720p@(1–25/30 fps)
Bit Rate Contro	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
Region of Interest (RoI)	Yes
Image Stabilization	Electronic

Defog	Electronic
Digital Zoom	16×
Privacy Masking	Up to 24 zones, with a maximum of 8 zones displayed simultaneously in the same frame; supports multiple colors and mosaic (optional).
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	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; SSL; QoS; FTP; UPnP; ICMP; SNMP; SNMPv1/v2c/v3(MIB-2); IGMP; ARP; RTCP; RTP; PPPoE; IP Filter; RTMP; Bonjour; TCP; SMB; NFS
Interoperability	ONVIF (Profile S & Profile G & Profile T);CGI;SDK
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (512 GB); FTP/SFTP; NAS
Browser	IE 7 and later versions Chrome 45 and later versions Firefox 52 and later versions
Management Software	Smart PSS; IVSS; NVR
Function	
SVC	Time Domain
Regional Focus	Yes
OSD Overlay	Preset; temperature; PTZ coordinate; zoom; north; geographical location; time; channel; image; pattern
Security Mode	Username and password; MAC address; HTTPS; IEEE 802.1x; network access control
User Management	Up to 32 users
Port	
Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT,bare wire)
Two-way Audio	Yes
Alarm Input	2 (on-off value input: 0–5 VDC)
Alarm Output	1 channel

Alarm Linkage	Capture; preset; tour; pattern; recording; alarm digital input; audio; send email
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card status detection; memory space detection; power exception detection
Power	
Power Supply	DC24V/2.5A±25%(standard); PoE (802.3at)
Power Consumption	Basic: 11.6W; Max.:24W(IR, PTZ)
Power	Standard
Environment	
Operating Temperature	–40 °C to +70 °C (–40 °F to +158 °F)
Operating Humidity	≤ 95%
Protection	IK10(Optional); IP66; TVS 6000 V lightning proof; surge protection; voltage transient protection
Structure	
Product Dimensions	325.3mm×Φ202.0mm
Packaging Dimensions	270mm×270mm×460mm
Net Weight	4.6kg
Gross Weight	7.0kg
Installation	Wall mount; Ceiling mount; Pole mount; Horizontal pole mount; Corner mount
Accessories	Power supply included Mount adapter optional Wall mount: DH-PFB303W + mount adapter Ceiling mount: DH-PFB300C + mount adapter Pole mount: DH-PFA150 + DH-PFB303W + mount adapter Horizontal mount: DH-PFA150 + DH-PFB300C + mount adapter Corner mount: PFA151 + PFB303W + mount adapter

Dimensions (mm [inch])

Installation diagram

Wall Mount	Ceiling Mount	Pole Mount(Horizontal)
PFA114+PFB303W+PFA120	PFA114+PFB301C	PFA114+PFB301C+PFA150

Pole Mount(Vertical)	Corner Mount
PFA114+PFB303W+PFA150	PFA114+PFB303W+PFA151