

DH-PTZ37225-HNP-XB-A-EG

2MP 25x Starlight Positioning System



WizMind

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 verticals.

System Overview

Dahua Starlight Series PTZ cameras offer crispy and colorful images in low illumination environment with the latest Starlight Technology. By upgraded H.265 encoding technology, it has very high capability for video encoding, which can effectively save bandwidth and storage space. IP67 can totally prevent damage from dirt and water, and increase applicability in electrical areas and other complicated scenarios.

Functions

Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from -40 °C to +70 °C (-40 °F to +158 °F) with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating makes it suitable for demanding outdoor applications.

- 1/2.8" 2Megapixel STARVIS™ CMOS.
- 25x optical zoom.
- Starlight technology.
- Max. 50/60 fps@1080p.
- IR distance up to 150 m.
- White light distance up to 50 m.
- Auto-tracking .
- IVS (Perimeter Protection).
- Job Monitoring.
- SMD Plus.
- IP67.



Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

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.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

Construction Monitoring

Helmet detection; helmet color recognition; workwear detection; lone working detection; absence detection.

Scene

It is specially designed to monitor instruments in the power industry, and can be widely used in places that need large-scale monitoring, have high requirements on image quality, and that need details on targets. It is ideal for locations such as rivers, forests, highways, airports, lookout posts, squares, parks, scenic spots, streets, stations, large venues, and the area surrounding residential areas.

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/white light on)
Illumination Distance	150 m (492.13 ft) (IR) 50 m (164.04 ft) (white light)
Illuminator On/Off Control	Zoom Prio; Manual; Smart IR; Off
Illuminator Number	4 (IR) 4 (white light)
Wiper	Wiper

Lens

Focal Length	4.8 mm–120 mm			
Max. Aperture	F1.6–F3.5			
Field of View	H: 58.7°–3.1°; V: 33.2°–1.7°; D: 67.3°–3.9°			
Optical Zoom	25×			
Focus Control	Auto; semi-auto; manual			
Close Focus Distance	0.1 m–1.5 m (0.33 ft–4.92 ft)			
Iris Control	Auto			
DORI Distance	Detect	Observe	Recognize	Identify
	1,655.2 m (5,430.45 ft)	653.8 m (2,145.01 ft)	331.0 m (1,085.95 ft)	165.5 m (542.98 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: –90° to +90°
Manual Control Speed	Pan: 0.1°/s–158°/s Tilt: 0.1°/s–53°/s
Preset Speed	Pan: 100°/s Tilt: 93.75°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
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; linkage tracking
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Job Monitoring	Helmet detection; helmet color recognition; workwear detection; lone working detection; absence detection
Auto Tracking	Yes
SMD	Yes

Video

Video Compression	H.264H;H.264B;Smart H.265+;H.264;H.265;MJPEG(Sub Stream);Smart H.264+
Resolution	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: 1080p/1.3M/720p@(1–50/60 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	H.264: 1792 kbps–8192 kbps H.265: 512 kbps–5632 kbps
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
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 and mosaics available
S/N Ratio	≥ 55 dB

Audio

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

Network Port	RJ-45 (10/100 Base-T)
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	RTMP;CGI;Dahua SDK;ONVIF;API
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	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
Mobile Client	iOS; Android
Certification	
Certifications	CE/FCC
Port	
RS-485	1 (baud rate: 1200 bps–9600 bps)
Alarm Linkage	Capture; preset; tour; pattern; recordings; 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	2/1
Audio I/O	1/1
Power	
Power Supply	36 VDC/2.23 A ± 25%
Power Consumption	Basic: 13 W Max.: 24 W (illuminator + wiper + PTZ)
Environment	
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Operating Humidity	≤ 95%
Protection	IP67, TVS 6000 V lightning proof; surge protection; voltage transient protection
Structure	
Product Dimensions	310.0 mm × 166.0 mm × 180.0 mm (12.20" × 6.53" × 7.09") (L × W × H)
Net Weight	5.9 kg (13.01 lb)
Gross Weight	7.0 kg (15.43 lb)

Ordering Information

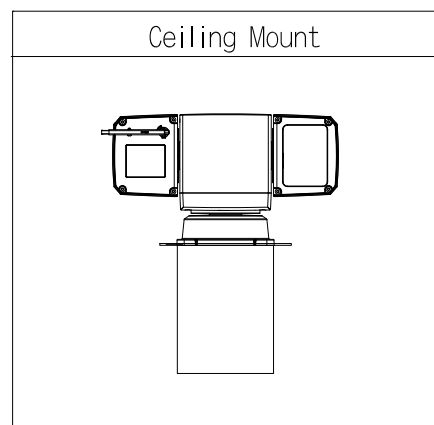
Type	Model	Description
2MP Camera	DH-PTZ37225-HNP-XB-A-EG	2MP 25x Starlight Positioning System
Accessories	DC36V/2.23A	Power Adapter

Accessories

Optional:



DC36V/2.23A
Power
Adapter



Dimensions (mm[inch])

