

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

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|----------------------------|--|
| IVS (Perimeter Protection) | Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; linkage tracking |
|----------------------------|--|

| | |
|----------------|---|
| 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 |
|-------------------|---|

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

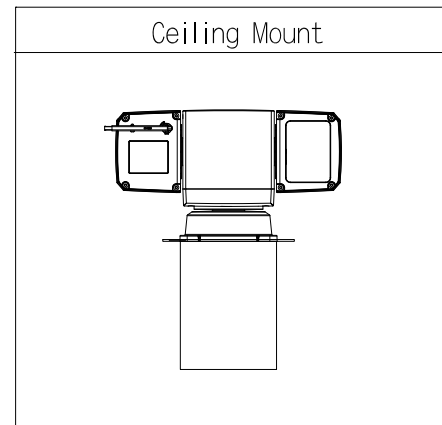
| Type | Model | Description |
|-------------|-------------------------|--------------------------------------|
| 2MP Camera | DH-PTZ37225-HNP-XB-A-EG | 2MP 25x Starlight Positioning System |
| Accessories | DC36V/2.23A | Power Adapter |

Accessories

Optional:



DC36V/2.23A
Power
Adapter



Dimensions (mm[inch])

