

DH-PTZ37225-HNP-GB-A-EG

2MP 25× Starlight IR Positioning System



WizMind

Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, IVSS, 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.

Series Overview

The Power Transformation Positioning System Camera offers precise focusing on preset points with remarkable accuracy. Its design incorporates a wide monitoring view, enabling clear target detection through PTZ rotation and zoom control. This versatile camera is well-suited for use in various types of substations.

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.

PFA Technology

PFA technology has introduced new methods of judgment that ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms that ensure image clarity when zooming and that shorten focus time. This makes the camera highly advanced in its functions, substantially improving the quality of your experience.

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.

- 1/2.8" 2Megapixel STARVIS™ CMOS
- 25× 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



Construction Monitoring

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

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.

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.

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	50 m (164.04 ft) (white light); 150 m (492.13 ft) (IR)
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: 58.5°–2.8° V: 33.2°–1.5° D: 67.5°–3.2°
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; manual

	Lens	Detect	Observe	Recognize	Identify
	W	66.2 m (217.21 ft)	26.5 m (86.88 ft)	13.2 m (43.44 ft)	6.6 m (21.72 ft)
	T	1655.2 m (5430.29 ft)	662.1 m (2172.12 ft)	331.0 m (1086.06 ft)	165.5 m (543.03 ft)
DORI Distance	*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–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
Idle Motion	Preset;Pattern;Tour;Scan
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
Face Detection	Supports face detection, face bounding box, capturing snapshots, uploading face snapshots, enhancing face images, and selecting a preferred image among a group of snapshots. Attribute Extraction is also supported, where 6 attributes and 8 expressions can be detected. The attributes are gender, age, glasses, mask, mustache and expressions. The expressions are angry, sad, hate, scared, surprised, calm, happy and confused. 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.
Construction Monitoring	Detects safety helmets that are red, orange, yellow, blue, white or black, and triggers alarms when people fail to wear their safety helmet or are wearing the wrong one. Supports uniform detection. You can upload up to 5 sample work uniform databases which support importing as many as 1,000 images in JPG format (1080p). When the similarity level between the detected uniform and the uniform sample in the database is too low, alarms are triggered. Offers Personal Protective Equipment Detection (PPE Detection), triggering alarms when the uniform color does not match, a person is not wearing a mask or they are not wearing a shoe cover. Performs lone working detection, triggering alarms when people are working alone in the detection area. Unmanned operation (leave post detection), triggers alarms when nobody is working in the detection area.
Auto Tracking	Yes

Video

Video Compression	Smart H.265+;H.265;Smart H.264+;H.264;H.264B;H.264H;MJPEG(Sub Stream 1)
Streaming Capability	3 streams
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 @(1–25/30 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: 64 kbps–10496 kbps H.265: 25 kbps–6400 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	DWDR

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 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	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;P2P
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	Smart PSS;DSS;DMSS;Easy4ip;IVSS;Player;ConfigTool;NVR;Smart Player
Mobile Client	iOS;Android

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	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.: 25 W (illuminator+heater+PTZ)
Power Adapter	Optional

Environment

Operating Temperature	–40 °C to +70 °C (–40 °F to +158 °F)
Operating Humidity	≤95%
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Storage Humidity	≤95%
Protection	IP67;TVS 6000 V lightning proof; surge protection; voltage transient protection

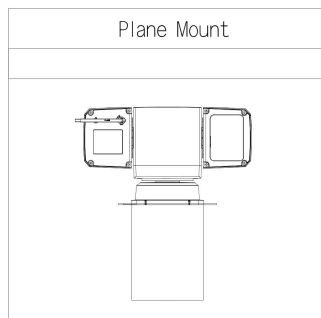
Structure

Product Dimensions	310 mm × 166 mm × 180 mm (12.20" × 6.54" × 7.09") (L × W × H)
Net Weight	5.90 kg (13.01 lb)
Gross Weight	6.98 kg (15.39 lb)

Ordering Information

Type	Model	Description
POSITIONING SYSTEM	DH-PTZ37225-HNP-GB-A-EG	2MP 25× Starlight IR Positioning System

Installation



Dimensions (mm[inch])

