

# PD2024W

**4MP IP Pendant PTZ camera with 42x motor zoom, IR, 1/1.8" CMOS**

## DESCRIPTION

The PD2024W is a 4-megapixel IP outdoor PTZ dome camera without a bubble. A powerful high-grade 42x optical zoom lens ensures sharp and clear images over a wide range. The integrated IR illumination ensures crispy images over 400 m in no light conditions. The high-speed pan, tilt, and zoom mechanism and auto-focus give instantaneous and stable focused images. The camera is fitted with several intelligent features making video surveillance easy. The PD2024W is equipped with a wiper.

## FEATURES

- 1/1.8 Progressive scan CMOS imager
- 2560x1440 (4MP)
- 42x optical zoom, 16x digital zoom
- 400°/s preset speed
- Integrated IR illumination up to 400 m
- 140 dB WDR (HDR)
- Supports EIS, Defog, BLC, and HLC
- Intelligent VCA, Auto tracking, AI
- IP67 and vandal proof IK10
- ONVIF Profile S and G conformant
- Wiper



## Description

Small form factor moveable PTZ camera

The PD2024W is a rugged pendant camera with PTZ capabilities. It is the versatility of this camera that makes it suitable for most if not all environments and applications.

Multi-encoder & multi-streaming

High-Efficiency Video Coding (HEVC)

H.265 or HEVC is a video compression standard, the successor of H.264. In comparison, H.265 offers about double the compression ratio at the same level of video quality or substantially improved video quality at the same bit rate. Thus saving bandwidth and recording space.

ONVIF

Multiple options are available to easily integrate the PD2024W into a video management system. In support of open standards, the PD2024W is compliant with ONVIF (Profile S, Profile G, Profile T).

Image enhancement

The PD2024W features a set of tools to enhance the image quality, such as smart IR, Defog, BLC, and 3D noise reduction.

Ease of installation

The PD2024W comes with mounting options (separately sold) for pendant wall mounting, pole mounting, ceiling mounting, and surface mounting.

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| Camera                     |  |
|----------------------------|--|
| Image sensor               | 1/1.8" CMOS  |
| Max. Resolution            | 2560x1440 (4MP)                                      |
| Max. Frame rate            | 30   |
| Minimum scene illumination | 0.001 lx (Color); 0.0005 lx (B/W); F1.2,<br>AGC on   |
| Shutter Speed              | 1 .. 1/30000 s                                       |
| Lens                       | Motorized 6 .. 252 mm (42x zoom), F1.2, Auto-iris    |
| Field of View              | 56.6 .. 1.7 deg horizontal, 33.7 .. 0.9 deg vertical |
| Focus Control              | Auto, Semi-auto, Manual, Rapid                       |
| Slow Shutter               | Supported  |
| Day/Night                  | Automatic IR-cut Filter                              |
| IR illumination            | 400 m; 850 nm  |

| Video                          |   |
|--------------------------------|---|
| Stream 1 resolutions           | 2560x1440, 1920x1080, 1280x960, 1280x720, D1                |
| Stream 2 resolutions           | 640x480, 4CIF, CIF  |
| Stream 3 resolutions           | 1920x1080, 1280x960, 1280x720, 640x480, 4CIF,<br>CIF        |
| Video Compression              | H.265, H.264, MJPEG   |
| H.264 profiles                 | Baseline profile, Main profile, High profile                |
| H.265 profiles                 | Main profile  |
| Video Bitrate                  |   |
| Bitrate Control                | CBR, VBR  |
| Number of video output streams | Up to 20  |
| Region of interest             | Supported, 8x   |
| Video output                   | Supported, 1x (1 Vp-p Composite Output (75 Ω/CVBS),<br>BNC) |

| Image                    |   |
|--------------------------|---|
| Image control            | Brightness, Contrast, Saturation, Sharpness,<br>Whitebalance, AGC |
| Day/Night control        | Day, Night, Auto, Schedule  |
| Wide dynamic range       | 140 dB  |
| SNR                      | 52 dB   |
| Image enhancement        | BLC, HLC, Defog, 3DNR, 2DNR                                       |
| Rotation                 | 0, 180  |
| Privacy masks            | Video.1.Image.PrivacyMask.Line                                    |
| Text and picture overlay | 8x Text, Date/time, Camera name, Picture                          |
| Image stabilization      | Supported (Built-in Gyro)   |

| PTZ        |                      |
|------------|----------------------|
| Pan range  | 0 .. 360° Endless    |
| Tilt range | -20 .. 90° Auto flip |

# Specs



## PTZ

|                   |   |
|-------------------|---|
| Pan speed         | 0.1 .. 280 °/s  |
| Tilt speed        | 0.1 .. 250 deg/s  |
| Preset accuracy   | 0.1°  |
| PTZ functions     | Presets, Pattern, Pan scan, Tilt scan, Random scan,<br>Calibrate North position, Auto PTZ tracking, Speed by zoom |
| Number of presets | 300   |

## Analytics

|                  |  |
|------------------|--|
| Smart analytics  | Line crossing, Intrusion detection, Zone enter,<br>Zone exit, Audio exception, Left luggage, Object removed,<br>Face detection, Person detection, Vehicle detection,<br>License plate recognition, Auto tracking |
| Event detections | Motion detection, Tampering, Network disconnected,<br>IP address conflict, Invalid login, Watchdog bark, Storage full,<br>Storage error  |
| Event actions    | Alarm output, Record video clip, Send message,<br>Upload image   |

## Audio

|              |  |
|--------------|--|
| Audio input  | 1x Line IN (mono)  |
| Audio output | 1x Line OUT (mono)                                       |
| Compression  | G.711ulaw, G.711alaw, G.722.1, G.726, MP2L2, PCM, AAC-LC |

## Data

|             |                  |
|-------------|------------------|
| Serial port | 1x RS-485 2-wire |
| Protocols   | Pelco-D, Pelco-P |

## Alarm

|        |                |
|--------|----------------|
| Input  | 7x Alarm IN    |
| Output | 2x Digital OUT |

## Network

|                  |   |
|------------------|---|
| Interface        | RJ45 10 M/100 M self-adaptive Ethernet port   |
| Protocols        | TCP, UDP, ICMP, HTTP, FTP, SRTP, RTP, DHCP, DNS, DDNS,<br>RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP v1/v2/v3, IGMP v1/v2/v3,<br>802.1x, QoS, IPv4, IPv6, Bonjour, TLS, ONVIF Profile S/G/T, SPI,<br>ISAPI, SMB, NFS, CIFS  |
| Interoperability | ONVIF Profile S/G/T, SPI, ISAPI   |
| Security         | Password, Complex password, HTTPS encryption,<br>802.1x port authentication, EAP, Watermark, IP address filter,<br>Basic authentication, Digest authentication, HTTP authentication,<br>ONVIF WSSE authentication, ONVIF digest authentication,<br>TRTP over HTTPS, RTSP over HTTPS, Logout after idle timeout, |

## Network

|               |   |
|---------------|---|
|               | Security audit log, TLSv1.2, TLSv1.3, Signed firmware, Secure boot      |
| Web browser   | Internet Explorer 11, Microsoft Edge, Google Chrome,<br>Mozilla Firefox |
| Local Storage | Supported, max. 256 GB  |

## Environmental

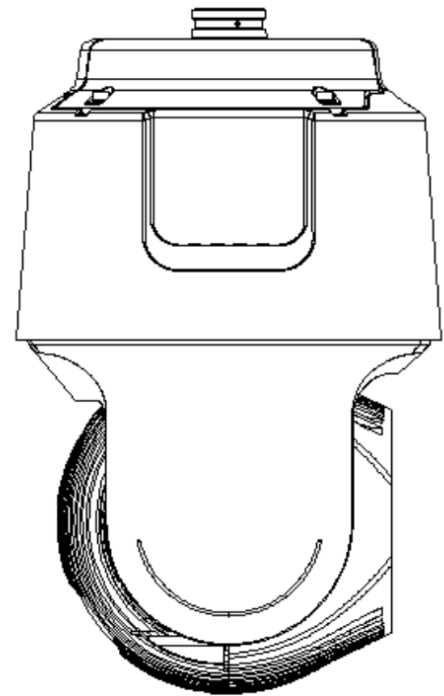
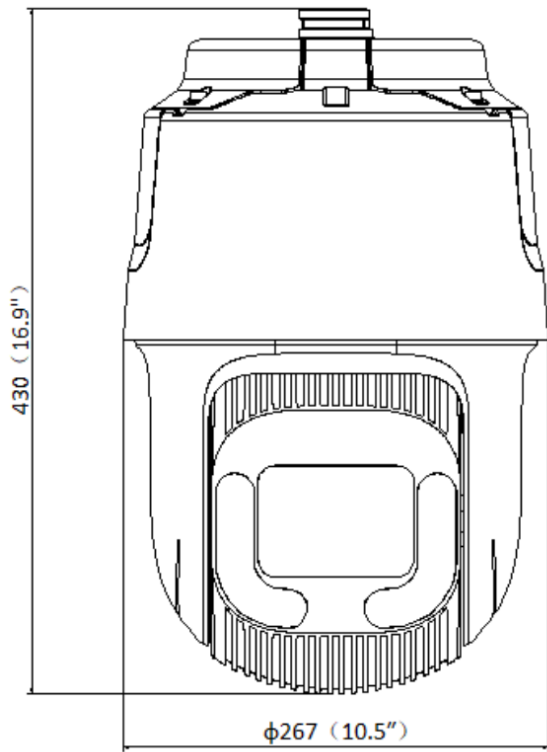
|                               |  |
|-------------------------------|--|
| Protection Level              | IP67, IK10   |
| Operating temperature         | -40 .. 70 °C (-40 .. 158 °F)   |
| Relative humidity (Operating) | Max. 95% (non-condensing)  |
| Storage temperature           | -30 .. 60 °C (-22 .. 140 °F)   |
| Relative humidity (Storage)   | Max. 95% (non-condensing)  |
| Power supply                  | 24VAC (max. 62W)<br>PoE 802.3bt (max. 51W)   |
| Overvoltage protection        | TVS 6000V lightning protection,<br>surge protection and voltage transient protection |

## Mechanical

|                    |                          |
|--------------------|--------------------------|
| Material           | Aluminium, Polycarbonate |
| Product dimensions | 267 x 267 x 430          |
| Product weight     | 9.6 kg (21.2 lbs)        |
| Package dimensions | 330 x 325 x 585          |
| Package weight     | 11 kg (24.3 lbs)         |

## Ordering Information

|        |   |
|--------|---|
| PD2024 | 4MP IP Pendant PTZ camera with 42x motor zoom, IR,<br>1/1.8" CMOS |
| WM12   | Wall mount, for PD20xx PTZ dome series                            |
| WM12B  | Wall mount with junction box, for PD20xx PTZ dome series          |
| PM07   | Pole mount, for PD20xx PTZ dome series                            |
| PM07B  | Pole mount with junction box, for PD20xx PTZ dome series          |
| WM17   | Corner mount, for PD20xx PTZ dome series                          |
| WM17B  | Corner mount with junction box, for PD20xx PTZ dome series        |
| CM11   | Ceiling mount, for PD20xx-series PTZ cameras                      |
| CM15   | Ceiling mount, for PD20xx-series PTZ cameras, 25 cm               |
| WM16   | Gooseneck mount, for PD20xx PTZ dome series                       |



Unit:mm(inch)

## RELATED



**TKH Security WM12**  
Wall mount, for PD20xx PTZ dome series



**TKH Security WM12B**  
Wall mount with junction box, for PD20xx PTZ dome series



**TKH Security PM07**  
Pole mount, for PD20xx PTZ dome series



**TKH Security PM07B**  
Pole mount with junction box, for PD20xx PTZ dome series



**TKH Security WM17**  
Corner mount, for PD20xx PTZ dome series



**TKH Security WM17B**  
Corner mount with junction box, for PD20xx PTZ dome series



**TKH Security CM11**  
Ceiling mount, for PD20xx-series PTZ cameras



**TKH Security CM15**  
Ceiling mount, for PD20xx-series PTZ cameras, 25cm



**TKH Security WM16**  
Gooseneck mount, for PD20xx PTZ dome series