

# PD950NW

5MP intelligent IP outdoor PTZ camera 40x zoom, IR

## DESCRIPTION

The PD950NW is a 5-megapixel IP outdoor PTZ camera. A powerful high-grade 40x optical zoom lens ensures sharp and clear images over a wide range. Built-in IR for zero lux operation. The high-speed pan, tilt, and zoom mechanism and auto-focus give instantaneous and stable focused images. Due to its unique servo feedback control the camera will always maintain its original (PT) position. When forced away from its original position the camera will return immediately.

## FEATURES

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1/2.7 inch Progressive scan CMOS imager

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Quad stream H.264, H.265 and MJPEG

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Max 5MP 30fps, 1080p 60fps

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40x optical zoom, 10x digital zoom

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20° tilt above horizon without optical distortion

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Secured Streaming, IEEE 802.1x authentication

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120 dB WDR (HDR)

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Built-In Gyro, EIS

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PT servo feedback

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ONVIF Profile S, G, T, M

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## Description

### Multi-stream high definition

The camera has the capability to stream simultaneous 4 video streams in H.265, H.264 and MJPEG. Multiple combinations of encoding, resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. Each selected resolution-frame rate combination can be freely set to a stream number. Also, the optimized encoding H.265/HEVC streaming provides the clear images with less transmission bandwidth and storage capacity required.

### Open standards

Multiple options are available to easily integrate the PD950NW to a video management system. In support of open standards, the camera is ONVIF conformant. Any VMS today supports this camera via its ONVIF driver.

### PT Servo feedback

The PD950NW pan and tilt motors are controlled by servo feedback, keeping track of the PTZ position at all times. No more drifting PTZ head due to shocks, vibration or vandalism. When the head is forced from its position, it will return immediately.

### Power source choices

The PD950NW can be powered with 24 Vac or over the network with PoE++ (802.3bt) sources.

(c) 20260420

Camera	
Image sensor	1/2.7" CMOS
Max. Resolution	2688x1944 (5MP)
Max. Frame rate	60 fps (1080p, HDR off)
Minimum scene illumination	0.05 lx (Color); 0.005 lx (B/W); F1.6
Shutter Speed	1 .. 1/10000 s
Lens	Motorized 4.3 .. 170 mm (40x zoom), F1.6, Auto-iris
Field of View	64.5° .. 1.8° horizontal, 48.6° .. 1.4° vertical
Focus Control	Auto, Manual, Push-AF
Slow Shutter	Supported
Day/Night	Automatic IR-cut Filter
IR illumination	200 m; 850 nm

Video	
Stream 1 resolutions	2688x1944, 2592x1944, 2688x1512, 1920x1080, 1280x1024, 1280x720, 800x600
Stream 2 resolutions	2688x1944, 2592x1944, 2688x1512, 1920x1080, 1280x1024, 1280x720, 800x600, 640x480, 320x240, D1, CIF
Stream 3 resolutions	1920x1080, 1280x1024, 1280x720, 800x600, 640x480, 320x240, D1, CIF
Stream 4 resolutions	320x240
Video Compression	H.265, H.264, MJPEG
H.264 profiles	Main profile, High profile
H.265 profiles	Main profile
Video Bitrate	64 .. 60000 kbps
Bitrate Control	CBR, VBR, Smart
Number of video output streams	Up to 10
Video output	Supported, 1x (For test/installation only)

Image	
Image control	Brightness, Contrast, Saturation, Sharpness, Whitebalance, AGC
Day/Night control	Auto, Night, Day, Light sensor, Light On, Light Off, Smart
Wide dynamic range	120 dB (Dual exposure HDR)
SNR	52 dB
Image enhancement	BLC, Defog, 3DNR, 2DNR, ColorNR
Rotation	0°, 90°, 180°, 270°
Mirror	Horizontal
Privacy masks	24 (Solid, Mosaic)
Text and picture overlay	8x Text, Date/time, Compass (Custom direction texts), Image (bmp)
Image stabilization	Supported (Gyro)
Digital Zoom	10x

PTZ	
Pan range	0° .. 360° Endless
Tilt range	-20° .. 100° Mechanical flip

# Specs



PTZ	
Pan speed	0.1 .. 90 °/s; Preset: max. 300 °/s
Tilt speed	0.1 .. 55 °/s; Preset: max. 300 °/s
Preset accuracy	0.16°
PTZ functions	Presets (256x), Tour (8x), Pattern, Pan scan, Calibrate North position, Speed by zoom
Number of presets	256
Number of sequences	8

Analytics	
Smart analytics	Intrusion detection, Car stopped, Wrong direction, Left luggage, Object removed, Object counting, Loitering, Auto tracking
Event detections	Motion detection, Tampering, Network disconnected, Audio detection, Periodical, Manual trigger
Event actions	Alarm output, Record video clip, Send message, Upload image

Audio	
Audio input	1x Line IN (stereo, 3.5mm connector)
Audio output	1x Line OUT (stereo, 3.5mm connector)
Compression	G.711ulaw, G.711alaw, PCM, AAC

Data	
Serial port	1x RS-485 2-wire
Protocols	Pelco-D, Diamond

Alarm	
Input	4x Alarm IN
Output	2x Digital OUT

Network	
Interface	100Base-TX (FE, IEEE 802.3u) / 1000Base-T (GbE, IEEE 802.3ab), MDI/MDI-X Auto negotiation
Protocols	TCP, UDP, ICMP, HTTP, FTP, RTP, DHCP, DNS, DDNS, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP v1/v2/v3, IGMP v1/v2/v3, 802.1x, QoS, IPv4, IPv6, SSL, TLS v1.0/v1.1/v1.2, ONVIF Profile S/G/T/M, SPI, DC, SMB, NFS, CIFS, TACACS+, NTCIP 1205, Diamond
Interoperability	ONVIF Profile S/G/T/M, SPI, DC
Security	Password, Complex password, HTTPS encryption, 802.1x port authentication, EAP, IP address filter, Basic authentication, Digest authentication, HTTP authentication, ONVIF digest authentication, RTSP over HTTPS, TLSv1.2 (HTTPS, 802.1x), Signed firmware, Secure boot
Web browser	Internet Explorer 11, Microsoft Edge, Google Chrome, Mozilla Firefox
Local Storage	uSD, uSDHC, uSDXC, max. 512 GB

# Specs



## Network

### Environmental

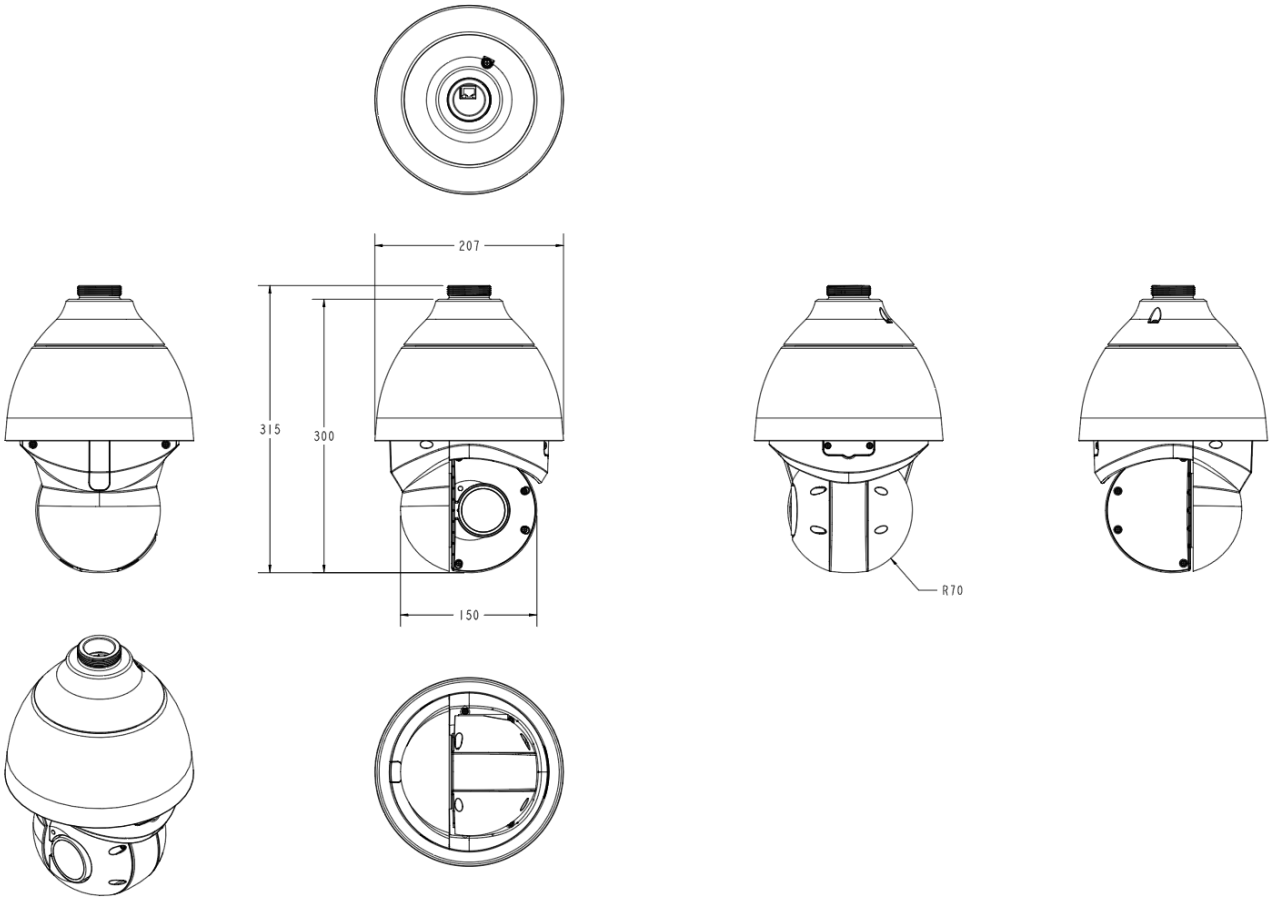
Protection Level	IP66, IK10
Operating temperature	-40 .. 74 °C (-40 .. 165.2 °F) (conform NEMA TS2)
Relative humidity (Operating)	Max. 95% (non-condensing)
Vibration (NEMA TS-2)	5 to 30 Hz, 0.5 g during 1 h (x, y, and z)
Shock (NEMA TS-2)	10 g (z, y, and z)
Max. wind velocity	225 km/h (150 mph)
Storage temperature	-20 .. 70 °C (-4 .. 158 °F)
Relative humidity (Storage)	Max. 60% (non-condensing)
Demister/Heater	Built-in
Power supply	AC 24 V (max. 78W), PoE 802.3bt type 3 (max. 51 W) Heater: 10W, Lamps: 18W

### Mechanical

Material	Aluminium, ABS
Connectivity	Terminal connectors
Product dimensions	207 x 207 x 300
Product weight	3.8 kg (8.4 lbs)
Package dimensions	405 x 250 x 370
Package weight	5.8 kg (12.8 lbs)
Color	Signal white, black

### Ordering Information

PD950NW	5MP IP Pendant PTZ camera with 40x motor zoom, IR, 1/2.7" CMOS
WM27	Wall mount for PD9x0
CM27	Ceiling mount 25cm for PD9x0
CM27A	Extension 25cm for CM27
JB27	Junction box, for WMO1A, WM27
WM27JB	Corner mount, for JB27, HSG04-Power
PM27JB	Pole mount, for JB27, HSG04-Power
WMO5	Corner mount for WMO1A, WM27
PMO1	Pole mount, for WMO1A, WM27
PTMO3	Bracket adapter for PD9x0 to fit HSD820-brackets
WMO1A	Bracket, Wall Mount, Short, with gasket kit
WPRO1	Wiper, for PD950, PD980



## RELATED



**TKH Security WM27**  
Wall mount, for PD9x0



**TKH Security PM01**  
Pole mount, for WMO1A, WM27



**TKH Security WM05**  
Corner mount, for WMO1A, WM27



**TKH Security JB27**  
Junction box, for WMO1A, WM27



**TKH Security CM27**  
Ceiling mount 25cm for PD9x0



**TKH Security CM27A**  
Extension 25cm for CM27



**TKH Security CTA01**  
Cable tail adapter for PD900, PD910, PD920, PD950DC, PD950NW