

TDPTZ4MP25IRST-PD-180P

4MP 25× Smart Dual Light Network Panoramic PTZ Camera



- 1/2.8" 4Megapixel STARVIS™ CMOS.
- 25× optical zoom.
- Starlight technology.
- Max. 25/30 fps@2560 × 1440..
- IR distance up to 656ft.
- Auto-tracking.
- Perimeter protection.
- Face detection.
- IP66.
- Sound and light alarm.
- 180° panoramic splicing.



System Overview

The multi-sensor series pushes the bar on PTZ cameras with its enhanced monitoring capabilities captured in its unique lens design. Fitted with an extra lens, it quickly tracks targets while keeping an eye on the monitored area. They also harness the strength of their embedded AI intelligent chip to perform a wide variety of intelligent functions, making them ideal for use in many scenarios.

Functions

Face Detection

Supports 6 attributes and 8 expressions. 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.

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.

TDPTZ4MP25IRST-PD-180P

Technical Specification

Camera				
Image Sensor	Panorama: 1/2.8" CMOS Detail: 1/2.8" CMOS			
Pixel	Panorama: 4 MP Detail: 4 MP			
Max. Resolution	Panorama: 3840 (H) × 1080 (V) Detail: 2560 (H) × 1440 (V)			
ROM	Panorama: 4 GB Detail: 4GB			
RAM	Panorama: 1 GB Detail: 1 GB			
Electronic Shutter Speed	Panorama: 1/1 s–1/10,000s Detail: 1/1s–1/30,000s			
Scanning System	Progressive			
Min. Illumination	Panorama: Color: 0.001 lux@F1.0 B/W: 0.0001 lux@F1.0 Detail: Color: 0.005 lux@F1.6 (1/25 s, 30 IRE, gain 100) B/W: 0.0005 lux@F1.6 (1/25 s, 30 IRE, gain 100) 0 Lux (IR on)			
Illumination Distance	Panorama: 30 m (98.43 ft) (White light) Detail: 200 m (656.17 ft) (IR)			
Illuminator On/Off Control	Zoom Prio; Manual; Smart IR; Off			
Illuminator Number	Panorama: 4 (White light) Detail: 4 (IR), 2 (White light)			

Lens				
Focal Length	Panorama: 2.8 mm Detail: 5 mm–125 mm			
Max. Aperture	Panorama: F1.0 Detail: F1.6–3.6			
Field of View	Panorama: H: 180° ± 5°; V: 51° Detail: H: 53.4°–3.4°; V:30.4°–1.95°; D:59.3°–3.9°			
Optical Zoom	Panorama: NA Detail: 25×			
Focus Control	Panorama: NA Detail: Auto; semi-auto; manual			
Close Focus Distance	Panorama: 0.3 m (0.98 ft) Detail: 1 m–9 m (3.28 ft–29.53 ft)			
Iris Control	Panorama: Fixed Detail: Auto; manual			
DORI Distance	Detect	Observe	Recognize	Identify
	Panorama: 38.6 m (126.64 ft) Detail: 2500 m (8202.10 ft)	Panorama: 15.3 m (50.20 ft) Detail: 987.5 m (3239.83 ft)	Panorama: 7.7 m (25.26 ft) Detail: 500 m (1640.42 ft)	Panorama: 3.9 m (12.80 ft) Detail: 250 m (820.21 ft)

PTZ	
Pan/Tilt Range	Detail: H: 0°–360° endless V: –20°–+90°
Manual Control Speed	Detail: Pan: 0.1°/s–160°/s Tilt: 0.1°/s–120°/s
Preset Speed	Detail: Pan: 240°/s; Tilt: 200°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Pattern; Preset; Scan; Tour
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; vehicle/human alarm classification; linkage tracking
Face Detection	Supports face detection, optimization, tracking, capturing pictures, uploading high-quality face snapshots, and face enhancement; Extracts 6 attributes and 8 expressions; Supports face cutout: Face, one-inch photo. Capturing strategies include real-time capturing, optimization, and quality first
Auto Tracking	Yes

Active Deterrence	
Light Warning	Supports white light warning; the flashing time can be configured as: 5 to 30 seconds, and the frequency can be configured as high/medium/low
Sound Warning	A total of 11 audio alarm contents, and supports importing custom audio. The sound can be configured at three levels: high/medium/low, and the duration time can be configured as 5 to 30 seconds. 110 dB.

Video	
Video Compression	H.264H;H.264B;Smart H.265+;H.265;MJPEG(Sub Stream);Smart H.264+;H.264M
Streaming Capability	3 streams
Resolution	Panorama: 3840 × 1080; 960 × 268; D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240); Details: 2560 × 1440 (2560 × 1440); 3M (2048 × 1536); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF(352 × 288/352 × 240)

TDPTZ4MP25IRST-PD-180P

Video Frame Rate	Panorama: 50 Hz Main stream (3840 × 1080@25 fps), Sub stream 1 (960 × 268@25 fps), Sub stream 1 (704 × 576@25 fps), Sub stream 1 (640 × 480@25 fps), Sub stream 1 (352 × 288@25 fps), Sub stream 2 (1920 × 540@25 fps), Sub stream 2 (1920 × 1080@25 fps), Sub stream 2 (1280 × 960@25 fps), Sub stream 2 (1280 × 720@25 fps) 60 Hz Main stream (3840 × 1080@30 fps), Sub stream 1 (960 × 268@30 fps), Sub stream 1 (704 × 576@30 fps), Sub stream 1 (640 × 480@30 fps), Sub stream 1 (352 × 288@30 fps), Sub stream 2 (1920 × 540@30 fps), Sub stream 2 (1280 × 960@30 fps), Sub stream 2 (1280 × 720@30 fps) Details: 50 Hz Main stream (2560 × 1440@25 fps), Main stream (2048 × 1536@25 fps), Main stream (2304 × 1296@25 fps), Main stream (1920 × 1080@25 fps), Main stream (1280 × 960@25 fps), Main stream (1280 × 720@25 fps) Sub stream 1 (704 × 576@25 fps), Sub stream 1 (640 × 480@25 fps), Sub stream 1 (352 × 288@25 fps), Sub stream 2 (1280 × 720@25 fps) 60 Hz Main stream (2560 × 1440@30 fps), Main stream (2048 × 1536@30 fps), Main stream (2304 × 1296@30 fps), Main stream (1920 × 1080@30 fps), Main stream (1280 × 960@30 fps), Main stream (1280 × 720@30 fps) Sub stream 1 (704 × 480@30 fps), Sub stream 1 (640 × 480@30 fps), Sub stream 1 (352 × 240@30 fps) Sub stream 2 (1280 × 720@30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	Panorama: H.264: 2,816 kbps-13,824 kbps H.265: 1,024 kbps-8,192 kbps Detail: H.264: 2,816 kbps-13,056 kbps H.265: 1,024 kbps-7,936 kbps
Day/Night	Panorama: Auto (ICR)/Color/B/W Detail: Auto (ICR)/Color/B/W
BLC	Yes
WDR	Panorama: Yes Detail: Yes
HLC	Yes
White Balance	Panorama: Auto; indoor; outdoor; ATW; manual; sodium lamp; natural light; street lamp Detail: Auto; indoor; outdoor; ATW; manual; sodium lamp; natural light; street lamp
Gain Control	Panorama: Auto/manual Detail: Auto/manual
Noise Reduction	Panorama: 2D/3D noise reduction Detail: 2D/3D noise reduction
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Electronic Image Stabilization (EIS)
Defog	Panorama: Electronic Defog Detail: Electronic Defog
Digital Zoom	16×
Image Rotation	180°
S/N Ratio	Panorama: ≥55 dB Detail: ≥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	FTP;RTMP;IPv6;Bonjour;IPv4;DNS;RTCP;PPPoE;NTP;RTP;802.1x;HTTPS;SNMP;TCP/IP;DDNS;UPnP;NFS;ICMP;UDP;IGMP;HTTP;SSL;DHCP;SMTP;Qos;RTSP;ARP
Interoperability	CGI;ONVIF (Profile S&G&T)
User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (up to 512 G); NAS
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions iOS 10 and later versions
Management Software	MDSS; DSS Pro
Mobile Client	iOS; Android

Certification

Certifications	CE: DHQA-ESH-P22100890/DHQA-ESH-P22100654B-A1
----------------	---

Port

Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT, bare wire)
Alarm Linkage	Capture; PTZ linkage (preset; tour; pattern); recording; alarm digital input; audio; send email
Alarm Event	Motion/Tampering detection; audio detection; network disconnection detection; IP conflict detection; SD card abnormal detection; memory space detection; tampering detection
Alarm I/O	2/1
Audio I/O	1/1

Power

Power Supply	36 VDC/2.23 A ± 25%
Power Consumption	Basic power consumption: 14 W Max. power consumption: 32 W (IR + intelligent functions + PTZ + Siren and Light Active Deterrence)

Environment

Operating Temperature	−40 °C to +65 °C (−40 °F to +149 °F)
Operating Humidity	≤95%
Protection	IP66

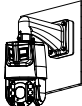
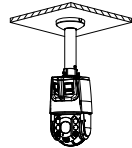
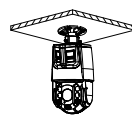
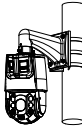
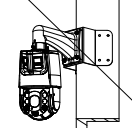
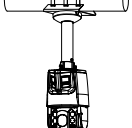
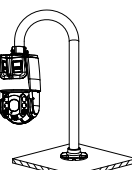
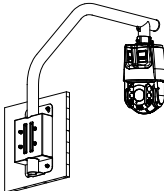
Structure

Casing Material	Plastic, aluminum alloy
Product Dimensions	247 mm × 202 mm × 359.8 mm (9.72" × 7.95" × 14.17") (L × W × H)
Net Weight	5.3 kg (11.68 lb)
Gross Weight	7.12 kg (15.70 lb)

TDPTZ4MP25IRST-PD-180P

Ordering Information

Type	Model	Description
4MP Camera	TDPTZ4MP25IRST-PD-180P	4MP 25× Smart Dual Light Network Panoramic PTZ Camera
Accessories	DC36V/2.23A	Power Adapter
	PFA114	Mount Adapter
	PFB303W	Wall Mount Bracket
	PFB300C	Ceiling Mount Bracket
	PFB301C	Ceiling Mount Bracket
	PFA150	Vertical Pole Mount Bracket
	PFA151	Corner Mount Bracket
	PFA150 + PFB300C	Horizontal Pole Mount Bracket
	PFB301S-E	Plane Mount Bracket
	PFB303S	Parapet Mount Bracket

Wall Mount	Ceiling Mount	Ceiling Mount
PFA114+PFB303W+PFA120	PFA114+PFB300C	PFA114+PFB301C
		
Pole Mount(Vertical)	Corner Mount	Pole Mount(Horizontal)
PFA114+PFB303W+PFA150	PFA114+PFB303W+PFA151	PFA114+PFB300C+PFA150
		
Plane Mount	Parapet Mount	
PFA114+PFB301S-E	PFA114+PFB303S	
		

Accessories

Included:



DC36V/2.23A
Power Adapter



PFA114
Mount Adapter



PFB303W
Wall Mount Bracket

Optional:



PFB300C
Ceiling Mount Bracket



PFB301C
Ceiling Mount Bracket



PFA150
Vertical Pole Mount Bracket



PFA151
Corner Mount Bracket



PFA150 + PFB300C
Horizontal Pole Mount Bracket



PFB301S-E
Plane Mount Bracket



PFB303S
Parapet Mount Bracket

Dimensions (mm[inch])

