

# SN-TPT4233PA-M

Explosion-proof Bi-spectrum PTZ Camera



## Key Features

- Uncooled VOx Micro bolometer with 400×300 resolution
- 25/50 mm motorized focus lens optional
- NETD ≤ 40mK
- Support temperature monitoring exception alarm
- Support 3 temperature measurement rule types (spot, line, area)
- Support human/vehicle detection and smoke & fire detection
- Intelligent analysis: intrusion, single line crossing, double line crossing, loitering, wrong-way, people counting, enter area, leave area
- Material: 316L Stainless steel
- IP68

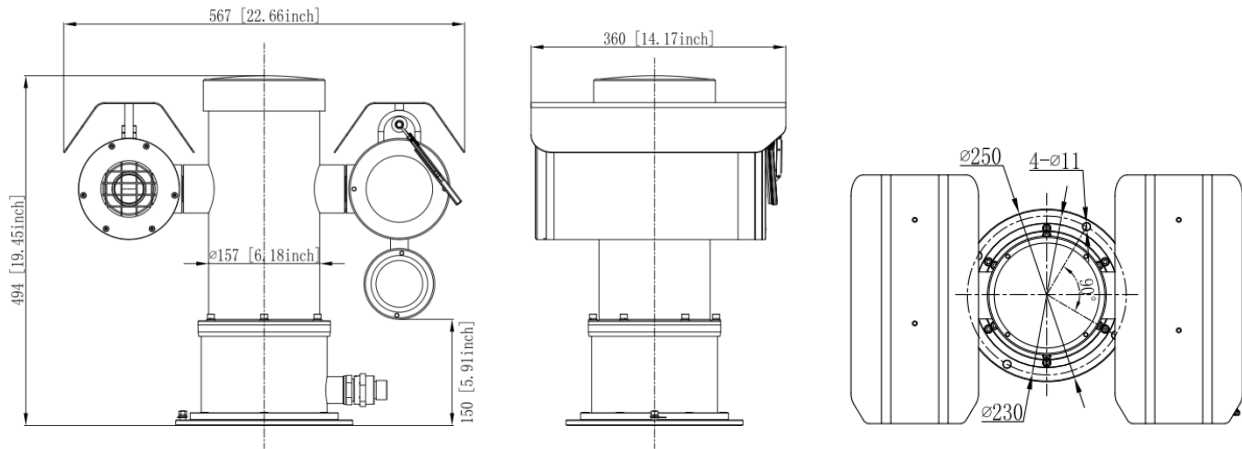
## Specification

Thermal Camera		
Detector Type	Uncooled VOx Micro bolometer 400×300	
Resolution	Sensor is 400×300. Image can be scaled up to 704×576	
Pixel size	17μm	
Spectral Range	8 to 14μm	
Thermal Sensitivity (NETD)	≤ 40mK	
Lens Type	Fixed focal length	
Focus Control	Motorized focus	
Focal Length	25mm	50mm
F No.	F1.0	F1.0
Angle of View	H: 15.4°, V: 11.6°	H: 7.7°, V: 5.8°
Detection Distance (Fire: 1m×1m)	735m (2,411.4ft)	1,417m (4,649ft)
Detection Distance (Humans: 1.8×0.5m)	735m (2,411.4ft)	1,417m (4,649ft)
Detection Distance (Vehicles: 4×1.5m)	2,255m (7,398.3ft)	4,510m (14,796.6ft)
Recognition Distance (Humans: 1.8×0.5m)	184m (603.7ft)	368m (1,207.3ft)
Recognition Distance (Vehicles 4×1.5m)	564m (1,850.4ft)	1,127m (3,697.5ft)
Note: The detection ranges are calculated with Johnson's criteria and vary in different weather conditions.		
*Product performance is based on testing in a controlled environment. Your results may vary due to several external and environmental factors.		
Optical Module		
Image Sensor	1/2.8" Sony CMOS	
Max. Resolution	2592 (H)×1944 (V)	
Shutter Speed	1/1 to 1/30,000s	
Min. Illumination	Color: 0.07 Lux @ (F1.6, AGC ON), B/W: 0.02 Lux, 0 Lux with IR on	
S/N Ratio	More than 55 dB	
Focal Length	5.3 to 159mm, 30x optical zoom	
Max Aperture	F1.6 to F4.3	
Angle of View	H: 55° to 2.3°, V: 41.6° to 1.7°	
Digital Zoom	16x	
Focus Control	Auto/Manual/Semi-automatic	
Mirror	Support	
Defog	Support	
Privacy Masking	Support	

Illuminator	
Illuminator Type	IR
Illumination Distance	IR distance up to 100m (328.08ft)
PTZ	
Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: +90° to -90°
Pan/Tilt Speed	Pan: 0.1° to 30°/s, Tilt: 0.1° to 20°/s
Wiper	Support
Preset Accuracy	≤ 0.2°
Presets	400
Scan	8 scans
Patrol	12 patrols, up to 32 presets per patrol
Track	6 tracks
3D Positioning	Support
Speed Setup	Auto/Manual (0-8)
Power Off Memory	Support
Idle Motion	The time can be set (1-240 minutes), and functions such as preset positions, patrols, scans, and tracks can be run.
Video and Audio	
Main Stream	Thermal: D1 @25/30fps Optical: 2592×1944, 2592×1520, 1920×1080, 1280×720 @25/30fps
Sub Stream	Thermal: CIF @25/30fps Optical: D1, VGA, CIF @25/30fps
Bit Rate Control	CBR/VBR
Bit Rate	Thermal: main stream: 100Kbps to 6Mbps, sub stream: 10Kbps to 1.5Mbps Optical: main stream: 200Kbps to 12Mbps, sub stream: 100Kbps to 6Mbps
Region of Interest	Off / On (8 Zone, Rectangle)
Smart Encode	Support
Audio Compression	G.711: 64Kbps, RAW_PCM: 128Kbps
Smart Function	
Smart Alarm	Motion detection, I/O alarm, Disk alarm, IVS alarm, Temperature detection & alarm
Intelligent Detection	Human detection, Vehicle detection, Fire point detection and smoke & fire detection
Intelligent Analysis	Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way, Enter area, Leave area, Smart motion detection Support alarm triggering by specified target types (human and vehicle), People counting
Temperature Detection	
Temperature Detection	3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line).
Temperature Alarm	Temperature difference alarm, Threshold alarm, Temperature rise alarm
Accuracy	±2℃ (35.6°F) / ±2%
Response Time	≤ 30ms

Temperature Range	-20°C to 150°C (-4°F to 302°F)
<b>Network</b>	
Protocols	IPv4/IPv6 ,HTTP,RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, PPPOE, SMTP, 802.1x
Interoperability	ONVIF, CGI, SDK
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge
Web Language	English, Chinese, Polish, Italian, Portuguese, Spanish. Russian, French, Czech, Hungarian
<b>Interface</b>	
Network Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector
Audio Interface	1ch input, 1ch output
Alarm Interface	5ch input, 1ch output
RS-485	Support
Reset Button	Built-in
SD Card Slot	Built-in Micro SD card slot, up to 256GB
<b>Electrical</b>	
Power Supply	100 to 240 VAC
Power Consumption	Max 75 W
Working Temperature	-40°C to 60°C (-40°F to 140°F)
Storage Conditions	0 to 90% RH
Certifications	CE/FCC
Ingress Protection	IP68
Casing	SUS316L
Dimensions	567 × 360 × 494mm (22.66 × 14.17 × 19.45 inch)
Net Weight	52kg (114.64lb)
<b>Ordering Information</b>	
<b>Model</b>	<b>Description</b>
SN-TPT4233PA-M25-ZSE30	Thermal Focal Length: 25mm, Optical Focal Length: 5.3 to 159mm
SN-TPT4233PA-M50-ZSE30	Thermal Focal Length: 50mm, Optical Focal Length: 5.3 to 159mm

## Dimensions (mm)



## Accessories

### Optional:



SN-BK402A-SS  
Wall Mount



SN-BK400-SS(P/F/D)  
Junction Box



SN-CPL10A-SS  
Washing Tank



Flexible Tube