

# SN-TPT4233PA-F

**Explosion-proof Bi-spectrum PTZ Camera** 



#### **Key Features**

- Uncooled VOx Micro bolometer with 400×300 resolution
- 8/15/25/35/50 mm fixed 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 Micr	Uncooled VOx Micro bolometer 400×300				
Resolution	Sensor is 400×300.	Sensor is 400×300. Image can be scaled up to 704×576				
Pixel size	17μm	17μm				
Spectral Range	8 to 14μm	8 to 14μm				
Thermal Sensitivity (NETD)	≤ 40mK	≤ 40mK				
Lens Type	Fixed focal length	Fixed focal length				
Focus Control	Manual focus	Manual focus				
Focal Length	8mm	15mm	25mm	35mm	50mm	
F No.	F1.0	F1.0	F1.0	F1.0	F1.0	
Angle of View	H: 46°, V: 35.3°	H: 25.5°, V: 19.2°	H: 15.4°, V: 11.6°	H: 11°, V: 9°	H: 7.7°, V: 5.8°	
Detection Distance (Fire: 1m×1m)	235m (771ft)	441m (1,446.9ft)	735m (2,411.4ft)	1,029m (3,376ft)	1,417m (4,649ft)	
Detection Distance (Humans: 1.8×0.5m)	235m (771ft)	441m (1,446.9ft)	735m (2,411.4ft)	1,029m (3,376ft)	1,417m (4,649ft)	
Detection Distance (Vehicles: 4×1.5m)	722m (2,368.8ft)	1,353m (4,439ft)	2,255m (7,398.3ft)	3,137m (10,292ft)	4,510m (14,796.6ft)	
Recognition Distance (Humans: 1.8×0.5m)	59m (193.6ft)	110m (360.9ft)	184m (603.7ft)	257m (843.2ft)	368m (1,207.3ft)	
Recognition Distance (Vehicles 4×1.5m)	180m (590.6ft)	338m (1,109ft)	564m (1,850.4ft)	789m (2,588.6ft)	1,127m (3,697.5ft)	

Note: The detection ranges are calculated with Johnson's criteria and vary in different weather conditions.

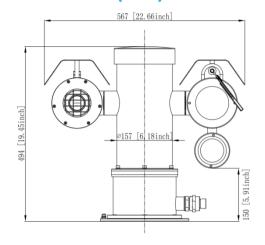
<sup>\*</sup>Product performance is based on testing in a controlled environment. Your results may vary due to several external and environmental factors.

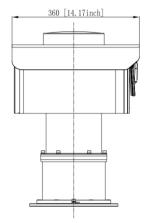
Optical Module		
Image Sensor	1/2.8" Sony CMOS	
Max. Resolution	2592 (H)×1944 (V)	
Shutter Speed	1/1 to 1/30,000s	
Min. Illumination	Color: 0.07 Lux @ (F1.6, AGC ON), B/W: 0.02 Lux, 0 Lux with IR on	
S/N Ratio	More than 55 dB	
Focal Length	5.3 to 159mm, 30x optical zoom	
Max Aperture	F1.6 to F4.3	
Angle 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	

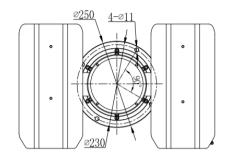
Illuminator			
Illuminator Type	IR .		
Illumination Distance	IR distance up to 100m (328.08ft)		
PTZ			
Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: +90° to -90°		
Pan/Tilt Speed	Pan: 0.1° to 30°/s, Tilt: 0.1° to 20°/s		
Wiper	Support		
Preset Accuracy	≤ 0.2°		
Presets	400		
Scan	8 scans		
Patrol	12 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°C (35.6°F) / ±2%		
Response Time	≤ 30ms		

Temperature Range	-20°C to 150°C (-4°F to 302°F)	
Network		
Protocols	IPv4/IPv6 ,HTTP,RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, PPPOE, SMTP, 802.1x	
Interoperability	ONVIF, CGI, SDK	
Web Viewer	<ie11, chrome,="" edge<="" firefox,="" microsoft="" td=""></ie11,>	
Web Language	English, Chinese, Polish, Italian, Portuguese, Spanish. Russian, French, Czech, Hungarian	
Interface		
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	
Electrical		
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)	
Ordering Information		
Model	Description	
SN-TPT4233PA-F08-ZSE30	Thermal Focal Length: 8mm, Optical Focal Length: 5.3 to 159mm	
SN-TPT4233PA-F15-ZSE30	Thermal Focal Length: 15mm, Optical Focal Length: 5.3 to 159mm	
SN-TPT4233PA-F25-ZSE30	Thermal Focal Length: 25mm, Optical Focal Length: 5.3 to 159mm	
SN-TPT4233PA-F35-ZSE30	Thermal Focal Length: 35mm, Optical Focal Length: 5.3 to 159mm	
SN-TPT4233PA-F50-ZSE30	Thermal Focal Length: 50mm, Optical Focal Length: 5.3 to 159mm	

### **Dimensions (mm)**







### **Accessories**

#### Optional:







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



SN-CPL10A-SS Washing Tank



Flexible Tube