SUNELL

SN-TPT4233LPZ-M

Thermal & Optical Bi-spectrum Stable PTZ Camera

Key Features

- VOx uncooled focal plane detector with 400×300 resolution

- NETD ≤ 40mK

- 75/100mm motorized thermal lens optical, 37x optical zoom module

- Support human/vehicle detection

- Support smoke & fire detection and fire point detection

- Smart events: intrusion, single line crossing, double line crossing, loitering, wrong-way, people counting, enter area, leave area

- Support 3 temperature measurement rule types (spot, line, area)

- Temperature measurement range: -20°C to 150°C (-4°F to 302°F)

- Power off self-locking, strong wind resistance

- Anti-frozen, NDAA Compliance, IP66

Specification

Thermal Module

Image Sensor	Uncooled VOx Focal Plane Arrays
Resolution	Sensor is 400×300. Image can be scaled up to 704×576
Pixel Pitch	17μm
NETD	≤ 40mK
Spectral Range	8 to 14 um
Image Setting	Brightness, Sharpness, Contrast, Mirror, FFC control, 2D/3D DNR
Pseudo-color Setting	White-hot/Black-hot/Rainbow/Ironbow etc. up to 17 modes

Thermal Lens

Focus Control	Motorized Focus	
Focal Length	75mm	100mm
Aperture	F1.0	F1.0
Angle of View	H: 5.1°, V: 3.8°	H: 3.8°, V: 2.3°
Detection Distance (Fire: 1×1m)	2,206 m (7,237.5ft)	2,941 m (9,649ft)
Detection Distance (Human: 1.8×0.5m)	2,206 m (7,237.5ft)	2,941 m (9,649ft)
Detection Distance (Vehicle: 4×1.5m)	6,765 m (22,194.9ft)	9,020 m (29,593.2ft)
Recognition Distance (Human: 1.8×0.5m)	551 m (1,807.7ft)	735 m (2,411.4ft)
Recognition Distance (Vehicle: 4×1.5m)	1691 m (5,547.9ft)	2255 m (7,398.3ft)

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	1/1.8" CMOS
Max. Resolution	2592 (H)×1520 (V), 4MP
Shutter Speed	1/5 to 1/20,000s
Min. Illumination	Color: 0.001 Lux @ (F1.5, AGC ON), B/W: 0.0001 Lux (F1.5, AGC ON),, 0 Lux with light
WDR	True WDR
Focal Length	6.8 to 251 mm, 37x optical zoom
Aperture	F1.5 to F4.8
Angle of View	H: 60.7° to 2.33°, V: 36.8° to 1.38°
Digital Zoom	16x
Focus Control	Auto/Manual/Semi-automatic
Mirror	Support

Defog	Support
Privacy Masking	Support
PTZ	
Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: +90° to -90°
Pan/Tilt Speed	Pan: 0.01° to 60°/s, Tilt: 0.01° to 30°/s
Wiper	Support
Preset Accuracy	± 0.1°
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.
Illuminator	
Illuminator Type	Laser
Illumination Distance	Up to 500m (1,640.4ft)
Video and Audio	
Main Stream	Thermal: 704×576 @ 25/30fps Optical: 2592×1520, 2304×1296, 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: 100Kbps to 6Mbps Optical: Main stream: 500Kbps to 16Mbps, Sub stream: 100Kbps to 6Mbps
Region of Interest	Off/On (8 Zone, Rectangle)
Audio Compression	G711: 64kbps, RAW_PCM: 128kbps
Smart Function	
Smart Alarm	Motion detection, Disk alarm, I/O alarm, IVS alarm, Temperature detection & alarm
Smart Detection	Support human/vehicle detection, fire point detection and smoke & fire detection (ship detection optional)
Intelligent Analysis	Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way, Enter area, Leave area (these 7 function support accurate detection of people/vehicles), 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	Over temperature alarm, Temperature difference alarm

Accuracy	±2℃ / ±2%
Response Time	≤ 30ms
Temperature Range	-20°C to 150°C (-4°F to 302°F)
Network	
Protocols	IPv4/IPv6, HTTP, HTTPS, RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, DDNS, PPPOE, FT, SMTP, 802.1x, SNMP
Interoperability	ONVIF, CGI, SDK
Max. User Access	10 Users
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge
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	2ch Audio In, 2ch Audio Out
Alarm Interface	9ch Alarm In, 4ch Alarm Out
RS485	Support
BNC Output	Support
Reset Button	Support (Built-in)
SD Card Slot	Built-in, up to 256GB
General	
Power Supply	DC36V
Power Consumption	Max 150W
Working Temperature	-40°C to 60°C (-40°F to 140°F)
Storage Conditions	0 to 90% RH
Certifications	CE /FCC
Ingress Protection	IP66
Casing	Metal
Dimensions	594×350×337mm (23.39×13.78×13.27")
Net Weight	≤ 26.6Kg (58.6lb)
Ordering Information	

Model	Description
SN-TPT4233LPZ-M75-ZSD37	Thermal Focal Length: 75mm Optical Focal Length: 6.8 to 251 mm, 37x optical zoom
SN-TPT4233LPZ-M100-ZSD37	Thermal Focal Length: 100mm Optical Focal Length: 6.8 to 251 mm, 37x optical zoom

Dimensions (mm)

594

337

350

181 210

181
210

4X⌀10.5