



## PRODUCT INFO

### PRODUCT NAME

Mini PTZ

### PRODUCT CODE

IIS-BPTM6451-F25 || IIS-BPTM6451-50

### PRODUCT CATEGORY

Fixed Camera

### PRODUCT PRICE

Contact us for a quote

## KEY FEATURES

- 640 × 512 resolution, 12μm, VOx UFPA, NETD ≤ 40 mK  
Thermal: 25mm motorized lens; Visible: 30x optical zoom module
- Detection capabilities: Human/vehicle, smoke & flame, and fire point detection
- Intelligent analytics: Intrusion, single/double line crossing, loitering, wrong-way, enter/leave area detection, smart motion detection, and people counting
- Support 3 temperature measurement rule types (spot, line, area)
- Temperature monitoring & alarm: -20°C to 150°C (-4°F to 302°F)
- Accuracy: ±2°C / ±2%
- NDAA Compliance, IP66



# Mini PTZ

## Bi-spectral Camera



## THERMAL AND OPTICAL MONITORING FOR CRITICAL INFRASTRUCTURE

The Mini PTZ Bi-Spectral Camera offers advanced bi-spectral imaging in within a smaller housing unit. With a monitoring range designed for mid-range coverage, it offers real-time visual and thermal data to support proactive maintenance, safety and security operations.

Designed for performance in any environment, it delivers continuous real-time monitoring and temperature data collection, even in challenging weather conditions. Equipped with a built-in pre-alarm system, the camera enables early detection of anomalies—alerting operators before a failure or catastrophic event occurs. Some other key applications include perimeter and site security, thermal monitoring of utility substations and surveillance for mass transit and more.

Seamlessly integrates into SYTIS systems such as GridSafe™, Vehicle Mounted Units, and Mobile Inspection Units (MIU), making it a versatile choice for scalable remote monitoring solutions. NDAA and NFPA 70B + 70E compliant.

## CONTACT US

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# TECHNICAL DATA SPECIFICATION

CAMERA		
Thermal		Visible
Image Sensor	Uncooled VOx Focal Plane Arrays 640×512	1/2.8" STARVIS CMOS
Resolution	Sensor is 640×512, Image can be scaled up to 704×576    1280×1024	2592 (H)×1520 (V), 4MP
Pixel Pitch	12 micrometers    17 micrometers	
NETD	≤ 40 mK	
Min. Illumination		Color: 0.07 Lux @(F1.6, AGC ON), B/W: 0.007 Lux (F1.6, AGC ON)
Shutter Speed		1/5 to 1/100,000s
Lens Type	Fixed Lens	30x optical zoom
Focal Length	25 mm or 50mm	5.3 to 159 mm
Focus Control	Motorized focus	Auto/Manual/Semi-automatic
Max. Aperture	F1.0	F1.6
Field of View (FOV)	H: 17°, V: 14°	H: 56.3° to 2.7°, V: 33.3° to 1.5°

IVS		
AI Multi-Target	Human and Vehicle detection	Face / Human / Vehicle detection and capture
Intelligent Analysis	Intrusion, Single Line Crossing, Double Line Crossing, Loitering, Wrong-Way Detection, Enter Area, Leave Area, Smart Motion Detection Support alarm triggering by specified target types (human and vehicle)	Intrusion, Single Line Crossing, Double Line Crossing, Loitering, Wrong-Way Detection, Smart Motion Detection Support alarm triggering by specified target types (human and vehicle)
Smoke and Flame Detection		Support
Fire Spot Detection	Support	
People Counting	Support	Support

VIDEO AND AUDIO		
Stream/Frame Rate	Stream1: 1280×1204, 1280×720, 704×576 @25fps Stream2: D1, CIF @25fps	Stream1: 2592×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720 @25/30fps Stream2: D1, VGA, CIF @25/30fps Stream3: VGA, CIF, QVGA @25/30fps
Bit Rate Control	CBR/VBR	CBR/VBR
Bit Rate	Stream1: 100 Kbps to 8 Mbps, Stream2: 100 Kbps to 6 Mbps	Stream1: 200 kbps to 12 Mbps Stream2: 100 kbps to 6 Mbps Stream3: 100 kbps to 3 Mbps
Region of Interest	Off/On (8 Zone, Rectangle)	Support
Audio Compression	G.711 A-law, G.711 micrometer-law, PCM	G.711 A-law, G.711 micrometer-law, PCM
Audio Bit Rate	64 Kbps (G.711), 128 Kbps (PCM)	64 Kbps (G.711), 128 Kbps (PCM)

IMAGE		
Image Setting	Brightness, Contrast, Sharpness	Brightness, Saturation, Contrast, Sharpness
Mirror	Horizontal / Vertical / Horizontal+Vertical	Horizontal / Vertical / Horizontal+Vertical
Pseudo-color Setting	Up to 17 colors (White-hot / Black-hot / Rainbow / Iron red / HSV / Bone / Cool / Copper / Fire-hot / Pink / Spring / Summer / Autumn / Winter / Jet / Flame / Rose -Bengal)	
FFC Control	Auto/Manual	
White Balance		Auto / Tungsten / Fluorescent / Daylight / Shadow / Manual
Day/Night		Auto / Day mode / Night mode / Timer
Noise Reduction	2D/3D DNR	2D/3D DNR
Image Enhancement		WDR, HLC, BLC, Defog
Wide Dynamic Range		True WDR
OSD	Up to 8 OSD	
Privacy Masking	Support	Support
Illuminator		White light: up to 30m (98.4ft)

Thermal	
Temperature Range	-20°C to 150°C (-4°F to 302°F)
Field of View	H: 12.4°, V: 9.9°    H:17°, V:14°

Accuracy	±2°C / ±2%
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
Temperature Display	Display in the lower left corner; follow the cursor display of the highest temperature, lowest temperature or average temperature
Response Time	≤ 30ms

PTZ	
Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: +90° to -90°
Pan/Tilt Speed	Pan: 0.01° to 30°/s, Tilt: 0.01° to 10°/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.

SMART FUNCTION	
Alarm Triggers	IVS, Temperature anomaly, Motion detection, Alarm Input, Disk alarm, Network alarm, Abnormal sound detection
Events Actions	Alarm out, Audible alarm, Alarm record, SMTP, FTP upload

NETWORK	
Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPOE, RTSP/RTP/RTCP, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, 802.1x, SNMP, Multicast
Compatible Integration	ONVIF (Profile S/T/G/M), CGI, SDK
User/Host Level	Up to 10 users, 3 levels: Administrator, Operator, Media user
Security	IP address filter, encrypted HTTPS, Illegal login lock, IEEE 802.1x
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge

INTERFACE	
Network Interface	2 Ethernet (10/100 Base-T) RJ-45 Connector
Audio Interface	1ch audio In, 1ch audio out
Alarm Interface	1ch alarm out
RS485	1
SD Card Slot	Built-in, up to 256GB
Reset Button	Built-in

GENERAL	
Power Consumption	Max 40 W
Working Temperature / Humidity	-30°C to 60°C (-22°F to 140°F) Humidity: Less than 90% RH
Web Language	English, Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian. Default: English
Power Supply	DC24V
Certifications	CE-EMC (EN 55032:2015+AE:2020, EN 55035:2017+AT:2020, EN 50130-4:2011+AT:2014, EN 61000-6-3:2007+AT:2011+AC:2012, EN IEC 61000-3-2:2019, EN 61000-3-3:2013+AT:2019) FCC (FCC 47 CFR 15, Subpart B, ANSI C63.4-2014)
Ingress Protection	IP66
Dimensions	323 ×192.5 ×177mm (12.7 × 7.58 × 6.97 inch)
Net Weight	5Kg (11.0lb)
Material	Metal

DETECTION RANGE	25mm	50mm
Detection Distance Fire(1*1m)	1042m	1471m
Detection Distance Man(1.8*0.5m)	1040m	1471m
Detection Distance Vehicle(4*1.5m)	3194m	4510m
Recognition Distance Man(1.8*0.5m)	260m	368m
Recognition Distance Vehicle(4*1.5m)	799m	1127m





## Dimensions (mm)

