# MS-7TPS6457ET-M

**Thermal & Optical Bi-spectrum Network Speed Dome** 

#### **Key Features**

- $640 \times 512$  (the resolution of output image is  $1920 \times 1080$ ) resolution
- 12 $\mu$ m, VOx UFPA, NETD  $\leq$  40mK
- 25mm motorized thermal lens, 40x optical zoom lens
- Support human/vehicle detection
- Support fire point detection, smoking detection and smoke & fire detection
- Smart events: intrusion, single line crossing, double line crossing, loitering, wrong-way,
   people counting, enter area, leave area and smart motion detection
- Smart tracking: Cold/hot spot tracking, human/vehicle and ship tracking
- Support 3 temperature measurement rule types (spot, line, area)
- Temperature range: -20°C to 150°C (-4°F to 302°F) or 0°C to 550°C (32°F to 1022°F)
- Smart rain-sensing wiper, IP66



### **Specification**

Thermal Module	
Image Sensor	Uncooled VOx Focal Plane Arrays
Resolution	Sensor is 640×512. Image can be scaled up to 1920×1080
Pixel Pitch	12μm
NETD	≤ 40mK
Spectral Range	8 to 14 μm
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	25 mm
Aperture	F1.0
Angle of View	H: 17°, V: 14°
Detection Distance (Humans: 1.8×0.5m)	1,040 m (3,412.1 ft)
Detection Distance (Vehicles: 4×1.5m)	3,194 m (10,479 ft)
Recognition Distance (Humans: 1.8×0.5m)	260 m (853 ft)
Recognition Distance (Vehicles: 4×1.5m)	799 m (2,621.4 ft)
Identification Distance (Humans: 1.8×0.5m)	130 m (426.5 ft)
Identification Range (Vehicles: 4×1.5m)	399 m (1,309 ft)

- \* The table is only for reference and the performance may vary according to different environment.
- \* The optimal detection, recognition, and identification distances are calculated according to Johnson's Criteria.

  Detection Range: In order to distinguish an object from the background, the object must be covered by 1.5 or more pixels.

Recognition Range: In order to classify the object (animal, human, vehicle, etc.), the object must be covered by 6 or more pixels.

Identification Range: In order to identify the object and describe it in details, the object must be covered by 12 or more pixels.

Detection Range Table	
Temperature Measurement (Object: 1 × 1m)	417 m (1,368.1 ft)
Temperature Measurement (Object: 0.2 × 0.2m)	83 m (272.3 ft)
Fire Detection (Object: 1 × 1m)	1,042 m (3,418.6 ft)
Fire Detection (Object: 0.2 × 0.2m)	208 m (682.4 ft)
Note: The table is for reference only. The	distances within it are subject to actual conditions including atmospheric conditions, target size, the

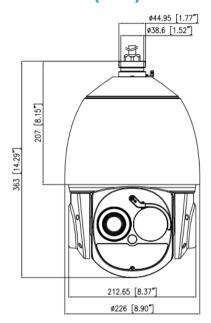
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Optical Module	
Image Sensor	1/1.8" Sony CMOS
Max. Resolution	2688 (H) ×1520 (V), 4MP
Shutter Speed	1/5 to 1/20,000s
Min. Illumination	Color: 0.001 Lux @ (F1.5, AGC ON), B/W: 0.0001 Lux (F1.5, AGC ON), 0 Lux with IR

WDR	True WDR
Focal Length	6.27 to 251mm, 40x 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
Mirror	Support
Defog	Support
Anti-shake	Support Gyroscope
Privacy Masking	Support
PTZ	заррот — — — — — — — — — — — — — — — — — — —
Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: -10° to +90°
Pan Speed	Pan: 0.01° to 300°/s, preset speed: 300°/s
Tilt Speed	Tilt: 0.01° to 240°/s, preset speed: 240°/s
Wiper	Support
Preset Accuracy	≤ 0.2°
Presets	400
Scan	12 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	IR .
Illumination Distance	Up to 300m (984.25ft)
Illumination Intensity And Angle	Automatically adjusted
Video and Audio	
Main Stream	Thermal: 1920×1080, 1280×1024, 1280×720, 640×512 @25fps Optical: 2688×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720 @25/30fps
Sub Stream	Thermal: D1, VGA, 640×512, CIF @25/30fps Optical: D1, VGA @25/30fps
Bit Rate Control	CBR/VBR
Bit Rate	Thermal: Main stream: 100Kbps to 12Mbps Sub stream: 100Kbps to 6Mbps Optical: Main stream: 100Kbps to 16Mbps, Sub stream: 100Kbps to 6Mbps
Region of Interest	Off/On (8 Zone, Rectangle)
Audio Compression	G711: 64kbps, RAW_PCM: 128kbps
Smart Function	

Motion detection, Disk alarm, I/O alarm, IVS alarm, Temperature detection & alarm  Support human/vehicle detection, fire point detection, smoking detection and smoke & fire detection  Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way, Enter area, Leave area (these 7 function support accurate detection of people/vehicles)  Support  Cold/hot spot tracking, human/vehicle tracking  3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line).  Over temperature alarm, Temperature difference alarm  ±2°C / ±2%  ≤ 30ms  -20°C to 150°C (-4°F to 302°F) or 0°C to 550°C (32°F to 1022°F)  IPv4/IPv6 ,HTTP,RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, PPPOE, SMTP, 802.1x  ONVIF, CGI, SDK  10 Users <el11, chrome,="" edge<="" firefox,="" microsoft="" th=""></el11,>
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English, Chinese, Polish, Italian, Portuguese, Spanish. Russian, French, Czech, Hungarian
1 Ethernet (10/100 Base-T) RJ-45 Connector
1ch Audio In, 1ch Audio Out
7ch Alarm In, 2ch Alarm Out
Support
Support
Built-in, up to 256GB
24VDC/36VDC/PoE++ (IEEE 802.3bt), Standard Equipped: 36VDC
Max 45 W
-40°C to 60°C (-40°F to 140°F)
0 to 90% RH
CE /FCC
IP66
Metal
$\phi$ 226 $ imes$ 363mm ( $\phi$ 8.9 $ imes$ 14.29 inch)
6 kg (13.2 lb)
Description
Thermal Focal Length: 25mm Optical Focal Length: 6.27 to 251mm

### **Dimensions (mm)**



#### **Accessories**

#### Optional:

