



# SN-TPC4233DJT-F

Thermal & Optical Bi-spectrum Network Bullet Camera



## Key Features

- Uncooled VOx Micro bolometer with 400×300 resolution
- Thermal: 8/15/25/35/50mm lens optional, optical: 5 to 50mm motorized lens
- Support human, vehicle and fire point detection
- Intelligent analysis: 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 monitoring and exception alarm, -20°C to 150°C (-4°F to 302°F)
- Smart IR distance up to 100m
- IP66

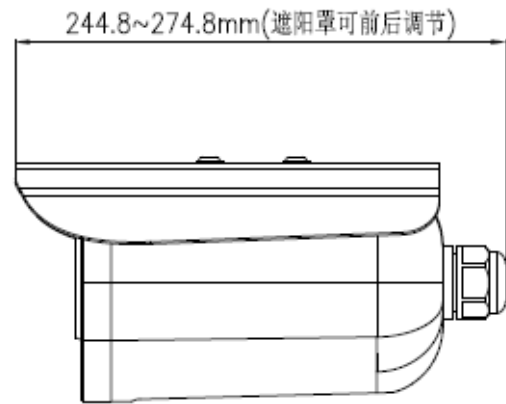
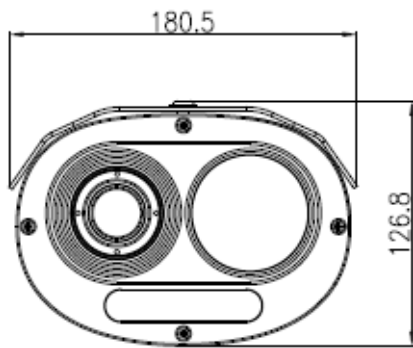
## Specification

Thermal Camera					
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays				
Resolution	Sensor is 400×300, Image can be scaled up to 704×576				
Pixel Pitch	17um				
Spectral Range	8 to 14um				
Thermal Sensitivity (NETD)	≤ 40mK				
Lens Type	Fixed, F1.0				
Focus Control	Manual focus				
Focal Length	8mm	15mm	25mm	35mm	50mm
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 (Humans: 1.8×0.5m)	235 m (771.7 ft)	441 m (1,446.9 ft)	734 m (2,408.1 ft)	1,028 m (3,372.7 ft)	1,469 m (4,819.6 ft)
Detection Distance (Vehicles: 4×1.5m)	722 m (2,368.8 ft)	1,353 m (4,439 ft)	2,255 m (7,398.3 ft)	3,157 m (10,357 ft)	4,510 m (14,796 ft)
Recognition Distance (Humans: 1.8×0.5m)	59 m (193.6 ft)	110 m (360.9 ft)	184 m (603.7 ft)	257 m (843.2 ft)	367 m (1,204.1 ft)
Recognition Distance (Vehicles: 4×1.5m)	180 m (590.6 ft)	338 m (1108.9 ft)	564 m (1850.4 ft)	789 m (2,588.6 ft)	1,127 m (3697.5 ft)
Identification Distance (Humans: 1.8×0.5m)	29 m (95.1 ft)	55 m (180.4 ft)	92 m (301.8 ft)	129 m (423.2 ft)	184 m (603.7 ft)
Identification Range (Vehicles: 4×1.5m)	90 m (295.3 ft)	169 m (554.5 ft)	282 m (925.2 ft)	395 m (1,295.9 ft)	564 m (1850.4 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.					
Visible Camera					
Temperature Measurement (Object: 1 × 1m)	94 m (308.4 ft)	176 m (577.4 ft)	294 m (964.6 ft)	412 m (1,351.7 ft)	588 m (1,929.1 ft)
Temperature Measurement (Object: 0.2 × 0.2m)	19 m (62.3 ft)	35 m (114.8 ft)	59 m (193.6 ft)	82 m (269 ft)	118 m (387.1 ft)
Fire Detection (Object: 1 × 1m)	235 m (771 ft)	441 m (1,446.8 ft)	735 m (2,411.4 ft)	1,029 m (3,376 ft)	1,471 m (4,826.1ft)
Fire Detection (Object: 0.2 × 0.2m)	47 m (154.2 ft)	88 m (288.7 ft)	147 m (482.3 ft)	206 m (675.9 ft)	294 m (964.6 ft)
Note: The table is for reference only. The distances within it are subject to actual conditions including atmospheric conditions, target size, the installation site, and more.					
Visible Camera					
Image Sensor	1/2.8" CMOS				
Effective Resolution	1920(H)×1080(V)				
Shutter Speed	1/5 to 1/20,000s				

Wide Dynamic Range	True WDR 120dB
Min. Illumination	Color: 0.1Lux @(F2.0, AGC ON), B/W: 0.01Lux @(F2.0, AGC ON), 0Lux with IR
S/N Ratio	More than 55dB
White Balance	Auto/Manual
Day & Night Mode	IR Cut Filter with Auto Switch
Focal Length	5 to 50mm
Angle of View	H: 50.85° to 7.67°, V: 27.78° to 4.36°
<b>Illuminator</b>	
IR Distance	Up to 100m (328.0ft)
<b>Video and Audio</b>	
Main Stream	Thermal: D1 (704×576) @25/30fps Optical: 1920×1080, 1280×720 @25/30fps
Sub Stream	Thermal: CIF @25/30fps Optical: D1, VGA, 640×360, CIF, QVGA @25/30fps
Bit Rate Control	CBR/VBR
Bit Rate	Main Stream: Thermal: 100Kbps to 6Mbps, Optical: 100Kbps to 12Mbps Sub Stream: Thermal: 10Kbps to 1.5Mbps, Optical: 10Kbps to 6Mbps
Region of Interest	Off/On (8 Zone, Rectangle)
Smart Encode	Support
Audio Compression	G.711: 64Kbps, RAW_PCM: 128Kbps
<b>Image</b>	
Image Setting	Brightness, Sharpness, Contrast, Saturation
Mirror	Support
Pseudo-color Setting	White-hot/Black-hot/Rainbow/Ironbow etc. up to 17 modes (Thermal)
DVE Image Enhance	Support (Thermal)
Noise Reduction	2D/3D DNR
Privacy Masking	Support
Motion Detection	Support
<b>Smart Function</b>	
Smart Function	Temperature measurement, human detection and vehicle detection
Advanced Intelligence Analysis	Smoker detection, Smoke and Flame detection, fire point detection
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 Measurement	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°C / ±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
Max. User Access	10 Users
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge
Web Language	English, Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian. Default: English
<b>Interface</b>	
Network Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector
Audio Interface	1ch input, 1ch output
Alarm Interface	2ch input, 2ch output
RS-485	Support
Reset Button	Support
<b>Electrical</b>	
Power Supply	12DCV/POE+ (IEEE 802.3at)
Power Consumption	Without heating: Max 10W, Including heating: Max 24W
Working Temperature	-40°C to 60°C (-40°F to 140°F)
Storage Conditions	Less than 90% RH
Certifications	CE /FCC
Ingress Protection	IP66
Casing	Metal
Dimensions	(244.8 to 274.8)×180.5×126.8 mm (9.64 to 10.82 × 7.11× 4.99 inch)
Net Weight	2.5Kg (5.51lb)
<b>Ordering Information</b>	
Model	Description
SN-TPC4233DJT-F8	Thermal Focal Length: 8mm, Optical Focal Length: 5 to 50mm
SN-TPC4233DJT-F15	Thermal Focal Length: 15mm, Optical Focal Length: 5 to 50mm
SN-TPC4233DJT-F25	Thermal Focal Length: 25mm, Optical Focal Length: 5 to 50mm
SN-TPC4233DJT-F35	Thermal Focal Length: 35mm, Optical Focal Length: 5 to 50mm
SN-TPC4233DJT-F50	Thermal Focal Length: 50mm, Optical Focal Length: 5 to 50mm

## Dimensions (mm)



## Accessories

### Optional:



SN-BK346  
Wall bracket



SN-BK350  
Ceiling Bracket



SN-CBK101A  
Pole Mount



SN-CBK102A  
Corner Mount