

HM-TD2638-4/G0/T1Y Thermal & Optical Bi-spectrum Bullet Camera

















HM-TD2638-4/G0/T1Y Anti-corrosion Bi-spectrum Network Bullet Camera is applied to perimeter protection and fire-prevention purposes in critical infrastructures such as: airport, railway, prison, power station, 4S stores, and so on. With the vanadium oxide uncooled focal plane sensor, it enhances the thermal image quality. It adopts anti-corrosion coating to meet the requirements of used in anti-corrosion environment.

- 384 × 288 resolution, 12 μm, VOx UFPA, NETD < 25 mK (25°C, F1.0)
- Video content analysis: vehicle/human classification
- Temperature exception alarm for fire prevention, -20°C to 150°C (-4°F to 302°F), ± 8°C (± 14.4°F)
- Fire detection and smoking detection Algorithm
- Support sun-reflection filter algorithm
- Image processing technology: linear, histogram, self-adaptive thermal AGC mode, DDE, 3D DNR
- High quality detector with 10 years guarantee



Specification

Image Sensor Vanadium Oxide Uncooled Focal Plane Arrays Resolution 384 x 288 Pixel Pitch 12 μm NETD ≤ 25 mK (@25° C,F# = 1.0) Focal Length 4.4 mm IFOV 2.73 mrad Aperture F1.0 Field of View 60.2° x 45° (H × V) Min. Focusing Distance 0.6 m Digital Zoom ×2, x4, x8 Optical Module Image Sensor 1/2.7° Progressive Scan CMOS Resolution 2688 x 1520 Min. Illumination 0.0176Lux @(F2.25,AGC ON), 0 Lux with IR Field of View 109.8° x 64.5° (H × V) Focal Length 22 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on the full screen of optical channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Internal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Fire Detection Up to 10 smoking points detected	Thermal Module				
Pixel Pitch 12 μm NETD ≤ 25 mK (@25° C,F# = 1.0) Focal Length 4.4 mm IFOV 2.73 mrad Aperture F1.0 Field of View 60.2° × 45° (H × V) Min. Focusing Distance 0.6 m Digital Zoom ×2, ×4, ×8 Optical Module Image Sensor 1/2.7° Progressive Scan CMOS Resolution 2688 × 1520 Min. Illumination 0.0176Lux @(F2.25,AGC ON), 0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. <	Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays			
NETD ≤ 25 mK (@25° C,F# = 1.0) Focal Length 4.4 mm IFOV 2.73 mrad Aperture F1.0 Field of View 60.2° × 45° (H × V) Min. Focusing Distance 0.6 m Digital Zoom ×2, ×4, ×8 Optical Module Image Sensor 1/2.7° Progressive Scan CMOS Resolution 2688 × 1520 Min. Illumination 0.0176Lux @(F2.25,AGC ON), 0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on the full screen of optical channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance IR Distance Up to 30 m Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Resolution	384 x 288			
Focal Length 4.4 mm IFOV 2.73 mrad Aperture F1.0 Field of View 60.2° × 45° (H × V) Min. Focusing Distance 0.6 m Digital Zoom ×2, ×4, ×8 Optical Module Image Sensor 1/2.7° Progressive Scan CMOS Resolution 2688 × 1520 Min. Illumination 0.0176.Lux @(F2.25,AGC ON), 0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on the full screen of optical channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Pixel Pitch	12 µm			
IFOV 2.73 mrad Aperture F1.0 Field of View 60.2° × 45° (H × V) Min. Focusing Distance 0.6 m Digital Zoom ×2, ×4, ×8 Optical Module Image Sensor 1/2.7° Progressive Scan CMOS Resolution 2688 × 1520 Min. Illumination 10.0176Lux @(F2.25,AGC ON),0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day 8 Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range 20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	NETD	≤ 25 mK (@25° C,F# = 1.0)			
Aperture F1.0 Field of View 60.2° × 45° (H × V) Min. Focusing Distance 0.6 m Digital Zoom ×2, ×4, ×8 Optical Module Image Sensor 1/2.7° Progressive Scan CMOS Resolution 2688 × 1520 Min. Illumination 0.0176Lux @(F2.25,AGC ON),0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range 20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Focal Length	4.4 mm			
Field of View 60.2° × 45° (H × V) Min. Focusing Distance 0.6 m Digital Zoom ×2, ×4, ×8 Optical Module Image Sensor 1/2.7" Progressive Scan CMOS Resolution 2688 × 1520 Min. Illumination 0.0176Lux @(F2.25,AGC ON) ,0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range 20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	IFOV	2.73 mrad			
Min. Focusing Distance Digital Zoom X2, ×4, ×8 Optical Module Image Sensor 1/2.7° Progressive Scan CMOS Resolution 2688 × 1520 Min. Illumination 0.0176Lux @(F2.25,AGC ON) .0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Aperture	F1.0			
Digital Zoom	Field of View	60.2° × 45° (H × V)			
Optical Module Image Sensor 1/2.7° Progressive Scan CMOS Resolution 2688 × 1520 Min. Illumination 0.0176Lux @(F2.25,AGC ON), 0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. 3 temperature Measurement and 1 line) Temperature Measurement Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Min. Focusing Distance	0.6 m			
Image Sensor 1/2.7° Progressive Scan CMOS Resolution 2688 × 1520 Min. Illumination 0.0176Lux @(F2.25,AGC ON), 0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. 3 temperature Measurement and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Digital Zoom	×2, ×4, ×8			
Resolution 2688 × 1520 Min. Illumination 0.0176Lux @(F2.25AGC ON), 0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Optical Module				
Min. Illumination 0.0176Lux @(F2.25,AGC ON), 0 Lux with IR Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Image Sensor	1/2.7" Progressive Scan CMOS			
Field of View 109.8° × 64.5° (H × V) Focal Length 2.2 mm Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Resolution	2688 × 1520			
Shutter Speed 1 s to 1/100,000 s White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Picture Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. 3 temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Min. Illumination	0.0176Lux @(F2.25,AGC ON) ,0 Lux with IR			
Shutter Speed 1 s to 1/100,000 s White Balance	Field of View	109.8° × 64.5° (H × V)			
White Balance MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Focal Length	2.2 mm			
White Balance Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Shutter Speed	1 s to 1/100,000 s			
Lamp/Natural Light Day & Night Mode IR Cut Filter with Auto Switch WDR 120 dB Image Effect Bi-spectrum Image Fusion Picture in Picture Display the details of optical channel on thermal channel Picture in Picture Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	White Ralance	MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light			
WDR120 dBImage EffectDisplay the details of optical channel on thermal channelPicture in PictureDisplay partial image of thermal channel on the full screen of optical channelTarget ColorationYes. Supported in white hot and black hot mode.EISThermal channel supports EIS, exclusive with all smart functionsIlluminatorIR DistanceUp to 30 mIR Intensity and AngleAutomatically adjustedSmart Function4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total.Temperature Measurement3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line)Temperature Range-20 °C to 150 °C (-4 °F to 302 °F)Temperature Accuracy± 8 °C (±14.4 °F)Fire DetectionDynamic fire detection, up to 10 fire points detectable	Willie Dalatice	Lamp/Natural Light			
Image Effect Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Day & Night Mode	IR Cut Filter with Auto Switch			
Bi-spectrum Image Fusion Display the details of optical channel on thermal channel Picture in Picture Display partial image of thermal channel on the full screen of optical channel Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	WDR	120 dB			
Picture in Picture Display partial image of thermal channel on the full screen of optical channel Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Image Effect				
Target Coloration Yes. Supported in white hot and black hot mode. EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Bi-spectrum Image Fusion	Display the details of optical channel on thermal channel			
EIS Thermal channel supports EIS, exclusive with all smart functions Illuminator IR Distance Up to 30 m IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Picture in Picture	Display partial image of thermal channel on the full screen of optical channel			
IR Distance	Target Coloration	Yes. Supported in white hot and black hot mode.			
IR Distance IR Intensity and Angle Automatically adjusted Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	EIS	Thermal channel supports EIS, exclusive with all smart functions			
IR Intensity and Angle Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Illuminator				
Smart Function VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	IR Distance	Up to 30 m			
VCA 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	IR Intensity and Angle	Automatically adjusted			
Up to 8 VCA rules in total. Temperature Measurement 3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Smart Function				
Temperature Measurement and 1 line) Temperature Range -20 °C to 150 °C (-4 °F to 302 °F) Temperature Accuracy ± 8 °C (±14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	VCA				
Temperature Accuracy \pm 8 °C (\pm 14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable	Temperature Measurement				
Fire Detection Dynamic fire detection, up to 10 fire points detectable	Temperature Range	-20 °C to 150 °C (-4 °F to 302 °F)			
	Temperature Accuracy	± 8 °C (±14.4 °F)			
Smoking Detection Up to 10 smoking points detected	Fire Detection	Dynamic fire detection, up to 10 fire points detectable			
	Smoking Detection	Up to 10 smoking points detected			



Optical channel 50 HZ: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720) Main Stream 60 HZ: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720) Thermal channel 25 fps (1280×720P, 704×576, 352×288, 384×288) Optical channel 50 HZ: 25 fps (704 × 576, 352 × 288) Sub-stream 60 HZ: 30 fps (704 × 480, 352 × 240) Thermal channel 25 fps (704 × 576, 352 × 288, 384 × 288) Video Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS),
Main Stream 60 HZ: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720) Thermal channel 25 fps (1280×720P, 704×576, 352×288, 384×288) Optical channel 50 HZ: 25 fps (704 × 576, 352 × 288) Sub-stream 60 HZ: 30 fps (704 × 480, 352 × 240) Thermal channel 25 fps (704 × 576, 352 × 288, 384 × 288) Video Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
Thermal channel 25 fps (1280×720P, 704×576, 352×288, 384×288) Optical channel 50 HZ: 25 fps (704 × 576, 352 × 288) Sub-stream 60 HZ: 30 fps (704 × 480, 352 × 240) Thermal channel 25 fps (704 × 576, 352 × 288, 384 × 288) Video Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
25 fps (1280×720P, 704×576, 352×288, 384×288) Optical channel 50 HZ: 25 fps (704 × 576, 352 × 288) Sub-stream 60 HZ: 30 fps (704 × 480, 352 × 240) Thermal channel 25 fps (704 × 576, 352 × 288, 384 × 288) Video Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
Optical channel 50 HZ: 25 fps (704 × 576, 352 × 288) Sub-stream 60 HZ: 30 fps (704 × 480, 352 × 240) Thermal channel 25 fps (704 × 576, 352 × 288, 384 × 288) Wideo Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
Sub-stream 60 HZ: 25 fps (704 × 576, 352 × 288) 60 HZ: 30 fps (704 × 480, 352 × 240) Thermal channel 25 fps (704 × 576, 352 × 288, 384 × 288) Video Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPOE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
Sub-stream 60 HZ: 30 fps (704 × 480, 352 × 240) Thermal channel 25 fps (704 × 576, 352 × 288, 384 × 288) Video Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
Thermal channel 25 fps (704 × 576, 352 × 288, 384 × 288) Video Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
25 fps (704 × 576, 352 × 288, 384 × 288) Wideo Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
Video Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, Protocols NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
Video Compression Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
Sub-Stream: H.265/H.264/MJPEG Audio Compression G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
Network IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, Protocols NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, Protocols NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
Protocols NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
PPPoE,TP,Bonjour,SFTP,SRTP,TLS MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS).
MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS),
HOLHOLK OLORAGE
Auto Network Replenishment (ANR)
API ISAPI,ISUP, HIKVISION SDK, and third-party management platform, Open
Network Video Interface, ONVIF (Profile S, Profile G)
Simultaneous Live View Up to 20 channels
User/Host level Up to 32 users, 3 levels: Administrator, Operator, User
Security User authentication (ID and password), MAC address binding, HTTPS
encryption, IEEE 802.1x access control, IP address filtering
Client iVMS-4200, Hik-Connect Interface
Alarm Input 2, alarm input (0-5 VDC) Alarm Output 2-ch, relay outputs (alarm response actions configurable)
Alarm Action SD recording/Relay output/Smart capture/FTP upload/Email linkage 1, 3.5 mm Mic in/Line in interface
Audio Input Line input: 2 - 2.4 V [p-p], output impedance: 1 KΩ ± 10%
Audio Output Linear level, impedance: 600 Ω
1, RJ45 10 M/100 M Self-adaptive Ethernet interface.
1, RS-485 interface (half duplex)
Analog Output $1.0V [p-p]/75\Omega$, PAL/NTSC/BNC



General	
Menu Language	32 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil)
Power Supply	24 VAC ± 25%, 12 VDC ± 25%,24VDC two-core terminal block PoE (802.3af, class 3)
Power Consumption	24 VAC ± 25%: 0.33 A to 0.55 A, max. 14 W 12 VDC ± 25%: 0.8 A to 1.33 A, max. 12 W PoE (802.3af, class 3): 36 V to 57 V, 0.33 A to 0.21 A, max. 12 W
Working Temperature/Humidity	Temperature: -40°C to 70°C (-40°F to 158°F) Humidity: 95% or less
Protection Level	IP67 Standard TVS 4000V lightning protection, surge protection, voltage transient protection IK10-rated housing NEMA 4X anti-corrosion housing
Dimensions	376.1 mm × 119.1 mm × 118.1 mm (14.81" × 4.68" × 4.65")
Weight	1.82 kg (4.01 lb)
Detection Range Table	
VCA Range for Humans	40 m
VCA Range for Vehicles	120 m

Range Table

VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	Temperature Measurement (Object: 0.2 × 0.2 m)	Fire Detection (Object: 0.2 × 0.2 m)	Smoking Detection
132m	44m	13.2m	52.8m	6.6m

DORI

- * The table is only for reference and the performance may vary according to different environment.
- * The optimal human 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.



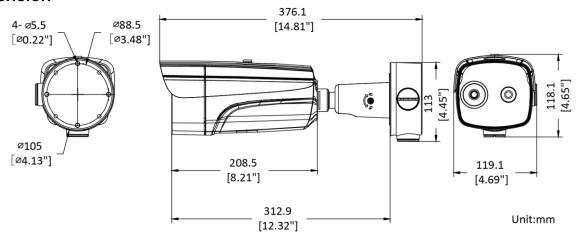
Detection Range	Detection Range	Recognition	Recognition	Identification	Identification
(Vehicles: 1.4 ×	(Humans: 1.8 ×	Range (Vehicles:	Range (Humans:	Range (Vehicles:	Range (Humans:
4.0 m)	0.5 m)	1.4 × 4.0 m)	1.8 × 0.5 m)	1.4 × 4.0 m)	1.8 × 0.5 m)
,	, ,			·	Ť



Available Model

HM-TD2638-4/G0/T1Y

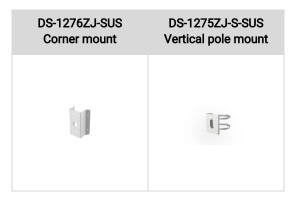
Dimension



- Accessory
- Included



Optional



COMPLIANCE NOTICE: The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different countries.



