

### DS-2TD2836-50 **Thermal & Optical Network Bullet Camera**

# **DeepinView**















#### Introduction

Hikvision DS-2TD2836-50 Thermal Bi-spectrum Network Bullet Camera is applied to perimeter defense and fire-prevention purposes in critical infrastructures such as: airport, railway, prison, power station, 4S stores, and so on. The pre-alarm system helps you discover unexpected events immediately and protects you from property loss.

#### Smart Function (Thermal Imaging)

- Leading image processing technology: Adaptive AGC, DDE, 3D DNR, NETD less than 40 mk (0.04°C), F#=1.0
- Powerful behavior analysis function, based on deep learning algorithm: Line crossing, Intrusion, Region Entrance & Exit
- Reliable temperature exception alarm function
- · Advanced fire detection algorithm
- Bi-spectrum image fusion, picture in picture preview

#### **Thermal Imaging Module Function**

- 384 × 288 resolution sensor, high sensitivity sensor, support contrast adjustment
- Shutter adjustment in various modes
- 3D DNR, 15 palettes of color adjustable, image detail enhancement
- Mirror image, digital zoom ×2, ×4, ×8, and local output





## Specifications

Thermal Module				
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays			
Max. Resolution	384 × 288			
Pixel Interval	17 μm			
Response Waveband	8 μm to 14 μm			
NETD	less than 40 mk (0.04°C), F#=1.0			
Lens (Focal Length)	50 mm			
MRAD	0.34 mrad			
Field of View	7.47°× 5.61° (H × V)			
Min. Focusing Distance	50 m			
Aperture	F 1.0			
Optical Module				
Max. Image Resolution	1920 × 1080			
Image Sensor	1/2.8" Progressive Scan CMOS			
Min. Illumination	Color: 0.001 Lux @(F1.2, AGC ON), B/W: 0.0001 Lux @(F1.2, AGC ON)			
Shutter Speed	1s to 1/100,000s			
Lens (Focal Length)	25 mm			
Field of View	12.7° × 7.2°(H × V)			
WDR	120 dB			
Day & Night	IR cut filter with auto switch			
Image Function				
Bi-spectrum Image Fusion	Fusion view of thermal view and overlaid details of the optical channel			
Picture in Picture	Combins details of thermal and optical image PIP, overlay thermal image on optical image			
Smart Function				
VCA (Video Content Analysis)	4 VCA rule types (Line Crossing, Intrusion, Region Entrance, and Region Exiting), up to 8 VCA rules.			
Temperature Measurement	3 temperature measurement rule types, 21 rules (10 points, 10 regions, 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 point detection, up to 10 fire points detectable.			
Infrared				
IR Distance	Up to 100 m			
IR Intensity and Angle	Automatically adjusted			



Network					
Main Stream	Visible Light: 50Hz: 25fps (1920 $\times$ 1080), 25fps (1280 $\times$ 960), 25fps (1280 $\times$ 720) Visible Light: 60Hz: 30fps (1920 $\times$ 1080), 30fps (1280 $\times$ 960), 30fps (1280 $\times$ 720) Thermal: 50fps ( 384 $\times$ 288)				
Sub Stream	Visible Light: 50Hz: 25fps (704 × 576), 25fps (352 × 288), 25fps (176 × 144) Visible Light: 60Hz: 30fps (704 × 480), 30fps (352 × 240), 30fps (176 × 120) Thermal: 50fps (384 × 288)				
Video Compression	H.265/H.264/MJPEG, H.265+/H.264+ encoding with Baseline/Main/High Profile				
Audio Compression	G .711u/G.711a/G.722.1/MP2L2/G.726/PCM				
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS,NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE				
Simultaneous Live View	Up to 20				
User/Host level	Up to 32 users, 3 levels: Administrator, Operator, User				
Security Measures	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x access control, IP address filtering				
Integration					
Alarm Input	2-ch inputs (0-5V DC)				
Alarm Output	2-ch relay outputs, alarm response actions configurable				
Alarm Action	SD recording/Relay output/Smart capture/FTP upload/Email linkage				
Audio Input	1 3.5mm Mic in/Line in interface. Line input: 2-2.4V[p-p], output impedance:1K $\Omega$ ±10% Linear Level; Impedance: $600\Omega$				
Audio Output					
Reset	1 Reset Button				
Ethernet	1 RJ45 10M/100M Self-adaptive Ethernet interface				
SD Memory Card	Built-in Micro SD card slot, support Micro SD/SDHC/SDXC card (up to 128G), support manual/alarm recording				
Analog Video Output	1.0V [p-p]/75Ω, PAL/NTSC/BNC				
Application Programming	Open-ended API, support ISAPI, HIKVISION SDK and third-party management platform				
Client	iVMS-4200				
Web Browser	IE9+, chrome31-chrome44, Firefox 30-Firefox51, Safari 5.02+(mac)				
General					
Menu language	English				
Power	24 VAC± 25%, 12 VDC± 20%, two-core terminal block PoE (802.3at, class 4)				
Power Consumption	24 VAC± 25%: 0.92 A, 12 VDC ± 20%: 1.9 A, max. 15W (22W with De-icing Heater On), PoE (802.3at, class 4): 42.5 V to 57 V, 0.4 A to 0.5 A				
Working Temperature/Humidity	-40 °C to 60 °C (-40 °F to 140 °F), 90% or less				
Protection Level	IP66 Standard TVS 6000V Lightning protection, surge protection, voltage transient protection				
Dimensions	535 mm × 171 mm × 400 mm (21.06 " × 6.73" × 15.75 ")				
Weight	Approx. 6 Kg (13.23 lb)				



### **Detection Range Table**

\* The table is only for reference, the performance may vary from camera to camera.

#### **Smart functions Range**

Different targets trigger the VCA events within different range limits.

VCA Range (Vehicles: 1.4×4.0m)	VCA Range (Humans: 1.8×0.5m)	Temperature Measurement (Object:2×2 m)	Temperature measurement (Object:1×1 m)	Fire Detection (Object:2×2 m)	Fire Detection (Object:1×1 m)
1500 m	500 m	1170 m	590 m	2940 m	1470 m

#### **Wide Range Coverage**

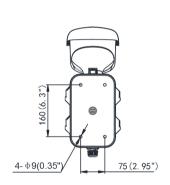
There is range limit for detecting, recognizing, and identifying human/vehicle targets.

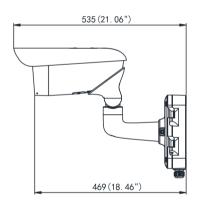
Detection Range	Detection Range	Recognition	Recognition	Identification	Identification
(Vehicles:	(Humans:	Range (Vehicles:	Range (Humans:	Range (Vehicles:	Range (Humans:
1.4×4.0m)	1.8×0.5m)	1.4×4.0m)	1.8×0.5m)	1.4×4.0m)	1.8×0.5m)
4510 m	1471 m	1127 m	368 m	564 m	184 m

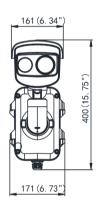
#### **Available Model**

DS-2TD2836-50

#### **Dimensions**









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