

DS-2TD2836-50/V1 Thermal & Optical Network Bullet Camera

# **DeepinView**



Hikvision DS-2TD2836-50/V1 Thermal Bi-spectrum Network Bullet Camera equipped with built-in GPU which support intelligent behavior analysis algorithm, can realize high precision VCA detection and real-time alarm. It is applied to perimeter defense and fire-prevention purposes in critical infrastructures such as: community, villa, construction site, factory, 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 (@25 °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 (@25°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 × 1080), 25fps (1280 × 960), 25fps (1280 × 720) Visible Light: 60Hz: 30fps (1920 × 1080), 30fps (1280 × 960), 30fps (1280 × 720) Thermal: 50fps ( 384 × 288)



	Visible Light: 50Hz: 25fps (704 × 576), 25fps (352 × 288), 25fps (176 × 144)				
Sub Stream	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				
	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.12				
Security Measures	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:1KΩ±109				
Audio Output	Linear Level; Impedance: 600Ω				
Reset	1 Reset Button				
Ethernet	1 RJ45 10M/100M Self-adaptive Ethernet interface				
	Built-in Micro SD card slot, support Micro SD/SDHC/SDXC card (up to 128G), support				
SD Memory Card	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),				
Power Consumption	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

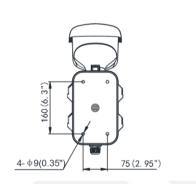
There is range limit for detecting, recognizing, and identifying human/vehicle targets.

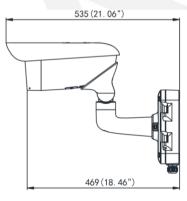
Detection Range	Detection Range	Recognition	Recognition	Identification	Identification
(Vehicles:	(Humans:	Range (Vehicles:	Range (Humans:	Range (Vehicles:	Range (Humans:
1.4×4.0m)	1.8×0.5m)	1.4×4.0m)	1.8×0.5m)	1.4×4.0m)	1.8×0.5m)
4510 m	1471 m	1127 m	368 m	564 m	184 m

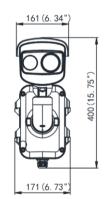
## Available Model

DS-2TD2836-50/V1

#### Dimensions









Distributed by



Headquarters

No.555 Qianmo Road, Binjiang District, Hangzhou 310051, China T +86-571-8807-5998 overseasbusiness@hikvision.com

Hikvision USA T +1-909-895-0400 sales.usa@hikvision.com

Hikvision Australia T +61-2-8599-4233 salesau@hikvision.com

Hikvision India T +91-22-28469900 sales@pramahikvision.com

Hikvision Canada T +1-866-200-6690 sales.canada@hikvision.com

Hikvision Thailand T +662-275-9949 sales.thailand@hikvision.com Hikvision Europe T +31-23-5542770 sales.eu@hikvision.com

Hikvision Italy T +39-0438-6902 info.it@hikvision.com

Hikvision Brazil T +55 11 3318-0050 Latam.support@hikvision.com

Hikvision Turkey T +90 (216)521 7070- 7074 sales.tr@hikvision.com

Hikvision Malaysia T +601-7652-2413 sales.my@hikvision.com Hikvision UK & Ireland T +01628-902140 sales.uk@hikvision.com

Hikvision South Africa Tel: +27 (10) 0351172 sale.africa@hikvision.com

Hikvision France T +33[0]1-85-330-450 info.fr@hikvision.com

Hikvision Kazakhstan T +7-727-9730667 nikia.panfilov@hikvision.ru

Hikvision Vietnam T +84-974270888 sales.vt@hikvision.com Hikvision UAE T +971-4-4432090 salesme@hikvision.com

Hikvision Singapore T +65-6684-4718 sg@hikvision.com

Hikvision Spain T +34-91-737-16-55 info.es@hikvision.com

Hikvision Tashkent T +99-87-1238-9438 uzb@hikvision.ru

Hikvision Hong Kong T +852-2151-1761 info.hk@hikvision.com Hikvision Russia T +7-495-669-67-99 saleru@hikvision.com

Hikvision Korea T +82-(0)31-731-8817 sales.korea@hikvision.com

Hikvision Poland T +48-22-460-01-50 info.pl@hikvision.com

Hikvision Indonesia T +62-21-2933759 Sales.Indonesia@hikvision.com

Hikvision Colombia sales.colombia@hikvision.com

© Hikvision Digital Technology Co., Ltd. 2019 | Data subject to change without notice |