

## DS-2TD2836-50 Thermal Bi-spectrum 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, and image switching

#### 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, 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       | 37 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 @(F1.5,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     | Yes                                                                                                  |
| Picture in Picture           | Yes                                                                                                  |
| 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)<br>Visible Light: 60Hz: 30fps (1920 × 1080), 30fps (1280 × 960), 30fps (1280 × 720)<br>Thermal: 50fps 384 × 288 |
| Sub Stream                   | Visible Light: 50Hz: 25fps (704 × 576), 25fps (352 × 288), 25fps (176 × 144)<br>Visible Light: 60Hz: 30fps (704 × 480), 30fps (352 × 240), 30fps (176 × 120)<br>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: 1KΩ±10%                                                                                                             |
| Audio Output                 | Linear Level; Impedance: 600Ω                                                                                                                                                                    |
| 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                  | IE7+, Chrome18+, Firefox5.0+, Safari5.02+                                                                                                                                                        |
| General                      |                                                                                                                                                                                                  |
| Menu language                | English                                                                                                                                                                                          |
| Power                        | 24V AC, 12V DC, PoE+                                                                                                                                                                             |
| Working Temperature/Humidity | -40 °C to 60 °C (-40 °F to 140 °F), 90% or less                                                                                                                                                  |
| Protection Level             | IP66 Standard<br>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 (Humans) | VCA Range (Vehicles) | Temperature Measurement (Object:2×2 m) | Temperature measurement (Object:1×1 m) | Fire Detection (Object:2×2 m) | Fire Detection (Object:1×1 m) |
|--------------------|----------------------|----------------------------------------|----------------------------------------|-------------------------------|-------------------------------|
| 720 m              | 2058 m               | 1170 m                                 | 590 m                                  | 2940 m                        | 1470 m                        |

### Wide Range Coverage

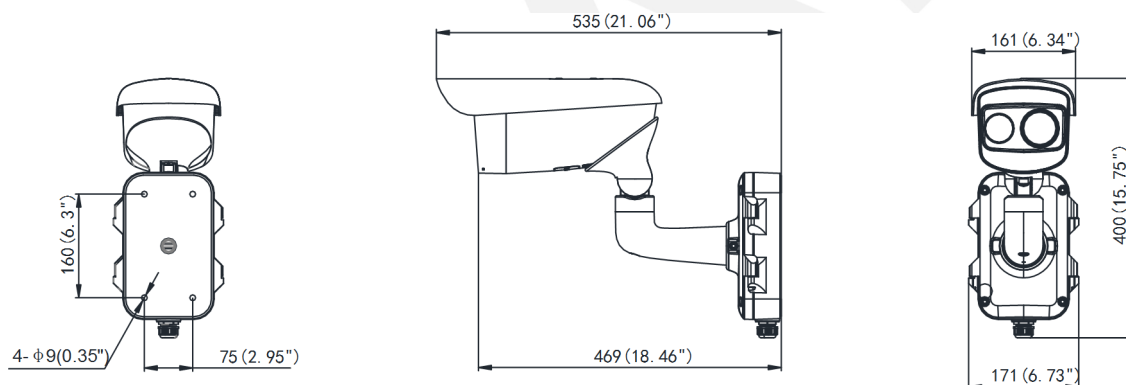
There is range limit for detecting, recognizing, and identifying human/vehicle targets.

| Detection Range (Vehicles) | Detection Range (Humans) | Recognition Range (Vehicles) | Recognition Range (Humans) | Identification Range (Vehicles) | Identification Range (Humans) |
|----------------------------|--------------------------|------------------------------|----------------------------|---------------------------------|-------------------------------|
| 4510 m                     | 1471 m                   | 1127 m                       | 368 m                      | 564 m                           | 184 m                         |

### Available Model

DS-2TD2836-50

### Dimensions



Distributed by

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