

DS-2TD2117-3/P Thermal Network Bullet Camera





Hikvision DS-2TD2117-3/P Thermal Network Bullet Camera, equipped with built-in GPU which supports 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 your property.

#### Smart Function (Thermal Imaging)

- Image processing technology: adaptive AGC, DDE, 3D DNR, NETD ≤ 40 mK (25 °C, F# = 1.1)
- Behavior analysis function, based on deep learning algorithm: line crossing, intrusion, region entrance & exit
- Temperature exception alarm
- Fire detection algorithm

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

- 160 × 120 (the resolution of output image is 320 × 240) resolution sensor, and high sensitivity sensor
- Support 3D DNR, 15 palettes of color adjustable, image detail enhancement, and contrast adjustment
- Mirror image, digital zoom ×2, ×4, ×8





# Specification

| Thermal Module                                    |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| Image Sensor                                      | Vanadium Oxide Uncooled Focal Plane Arrays   |  |  |  |  |  |  |
| Max. Resolution                                   | 160 × 120 (the resolution of output image is 320 × 240)  |  |  |  |  |  |  |
| Pixel Interval                                    | 17 μm  |  |  |  |  |  |  |
| Response Waveband                                 | 8 μm to 14 μm  |  |  |  |  |  |  |
| NETD (Noise Equivalent<br>Temperature Difference) | ≤ 40 mK (25 °C, F# = 1.1)  |  |  |  |  |  |  |
| Lens (Focal Length)                               | 3.1 mm   |  |  |  |  |  |  |
| IFOV  | 5.48 mrad  |  |  |  |  |  |  |
| Field of View                                     | 50° × 37.2° (H × V)  |  |  |  |  |  |  |
| Min. Focusing Distance                            | 0.2 m  |  |  |  |  |  |  |
| Aperture  | F 1.1  |  |  |  |  |  |  |
| Smart Function                                    |  |  |  |  |  |  |  |
| VCA (Video Content Analysis)                      | 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 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.   |  |  |  |  |  |  |
| Network   |  |  |  |  |  |  |  |
| Main Stream                                       | 1280 × 720, 704 × 576, 640 × 480, 352 × 288, 320 × 240   |  |  |  |  |  |  |
| Sub-stream  | 704 × 576, 352 × 288, 320 × 240  |  |  |  |  |  |  |
| Third Stream                                      | 1280 × 720, 704 × 576, 352 × 288, 320 × 240  |  |  |  |  |  |  |
| Video Compression                                 | H.265/H.264/MJPEG  |  |  |  |  |  |  |
| 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 (0-5 VDC)  |  |  |  |  |  |  |
| Alarm Output                                      | 2-ch relay outputs, alarm response actions configurable  |  |  |  |  |  |  |
| Alarm Action                                      | Preset/patrol scan/pattern scan/SD card record/relay output/smart capture/FTP upload/email linkage                       |  |  |  |  |  |  |
| Audio Input                                       | 1, 3.5 mm Mic in/Line in interface. Line input: 2-2.4 V [p-p], output impedance: 1 K $\Omega$ ± 10%                      |  |  |  |  |  |  |
| Audio Output                                      | Linear level, impedance: 600 Ω   |  |  |  |  |  |  |



| Communication Interface         | 1, RJ45 10M/100M self-adaptive Ethernet interface. 1, RS-485 interface                   |  |  |  |  |  |  |
|---------------------------------|--|--|--|--|--|--|--|
| SD Memory Card                  | Built-in MicroSD card slot, supporting MicroSD/SDHC/SDXC card (up to 128 GB)             |  |  |  |  |  |  |
|                                 | Supports manual/alarm recording  |  |  |  |  |  |  |
| Analog Video Output             | 1.0 V [p-p]/75 Ω, PAL/NTSC   |  |  |  |  |  |  |
| Application Programming         | Open-ended API, supporting ISAPI, HIKVISION SDK, and third-party management              |  |  |  |  |  |  |
|                                 | platform   |  |  |  |  |  |  |
| Client                          | iVMS-4200, Hik-Connect   |  |  |  |  |  |  |
| Web Browser                     | IE9+, Chrome 31-44, Firefox 30-51, Safari 5.02+ (mac)                                    |  |  |  |  |  |  |
| 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                           | 12 VDC ± 20%, two-core terminal block  |  |  |  |  |  |  |
| Power                           | PoE (802.3af, class 3)   |  |  |  |  |  |  |
| Deuver Consumption              | 12 VDC ± 20%: 0.4 A, max. 4.5 W  |  |  |  |  |  |  |
| Power Consumption               | PoE (802.3af, class 3): 42.5 V to 57 V, 0.14 A to 0.22 A, max. 5 W                       |  |  |  |  |  |  |
| Morking Tomporature /I lumiditu | -40 °C to 65 °C (-40 °F to 149 °F)   |  |  |  |  |  |  |
| Working Temperature/Humidity    | 95% or less  |  |  |  |  |  |  |
| Protection Level                | IP66 Standard  |  |  |  |  |  |  |
| Protection Level                | TVS 6000V lightning protection, surge protection, voltage transient protection           |  |  |  |  |  |  |
| Dimensions                      | 358.3 mm × 113.5 mm × 115.2 mm (14.10" × 4.47" × 4.53")                                  |  |  |  |  |  |  |
| Weight                          | Approx. 1.71 kg (3.77 lb)  |  |  |  |  |  |  |



# **Detection Range Table**

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

### **Smart Functions Range**

Different targets trigger the VCA events within different range limits.

| VCA Range<br>(Vehicles: 1.4 ×<br>4.0 m) | VCA Range<br>(Humans: 1.8 ×<br>0.5 m) | Temperature<br>Measurement<br>(Object: 2 × 2 m) | Temperature<br>Measurement<br>(Object: 1 × 1 m) | Fire Detection<br>(Object: 2 × 2 m) | Fire Detection<br>(Object: 1 × 1 m) |
|---|---------------------------------------|---|---|-------------------------------------|-------------------------------------|
| 63 m                                    | 21 m                                  | 66 m  | 33 m  | 180 m                               | 90 m                                |

### Wide Range Coverage

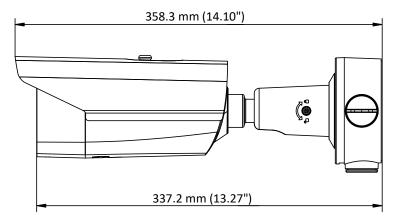
There is range limit for detecting, recognizing, and identifying human/vehicle targets.

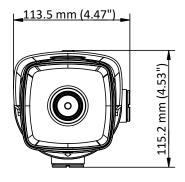
| Detection Range  | Detection Range | Recognition      | Recognition    | ldentification   | Identification |
|------------------|-----------------|------------------|----------------|------------------|----------------|
| (Vehicles: 1.4 × | (Humans: 1.8 ×  | Range (Vehicles: | Range (Humans: | Range (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)   |
| 280 m            | 91 m            | 70 m             | 23 m           | 35 m             | 11 m           |

# **Available Model**

DS-2TD2117-3/P

## Dimension







Distributed by

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