

## DS-2TD1217-3/QA Thermographic Network Turret Camera



Hikvision DS-2TD1217-3/QA Thermographic Network Turret Camera can be applied to substations, hydropower stations, waste incineration plants, manufacturing workshops, etc. The accurate temperature measurement device sends temperature exception alarms for loss prevention.

### ▪ Key Feature

- 160 × 120 resolution, 17 μm, VOx UFPA, NETD < 40 mK (25 °C, F# = 1.1)
- High accuracy temperature exception alarm, - 20 °C to 150 °C (- 4 °F to 302 °F) ± 8 °C (± 14.4 °F)
- Image processing technology: linear, histogram, self-adaptive thermal AGC mode, DDE, 3D DNR



## ▪ Specification

| Thermal Module           |  |
|--------------------------|--|
| Image Sensor             | Vanadium Oxide Uncooled Focal Plane Arrays   |
| Resolution               | 160 × 120  |
| Pixel Pitch              | 17 μm  |
| Spectral Range           | 8 μm to 14 μm  |
| NETD                     | < 40 mK (@ 25 °C, F# = 1.1)  |
| Focal Length             | 3.1 mm   |
| IFOV                     | 5.48 mrad  |
| Field of View            | 50.0° × 37.2° (H × V)  |
| Min. Focusing Distance   | 0.2 m  |
| Aperture                 | F1.1   |
| Digital Zoom             | × 2, × 4   |
| Optical Module           |  |
| Image Sensor             | 1/2.7" Progressive Scan CMOS   |
| Resolution               | 2688 × 1520  |
| Min. Illumination        | Color: 0.0176 Lux @ (F2.25, AGC ON), B/W: 0.0035 Lux @ (F2.25, AGC ON)   |
| Shutter Speed            | 1 s to 1/100,000 s   |
| Focal Length             | 4 mm   |
| Field of View            | 84.0° × 44.8° (H × V)  |
| Aperture (Range)         | F2.3   |
| WDR                      | 120 dB   |
| Image Effect             |  |
| Target Coloration        | Yes. Supported in white hot and black hot mode.  |
| Illuminator              |  |
| IR Distance              | Up to 15 m   |
| IR Intensity and Angle   | Automatically adjusted   |
| Audible and Visual Alarm |  |
| White Light Range        | Up to 30 m   |
| Visual Alarm             | Yes. White light alarm with adjustable flashing frequencies  |
| Audio alarm              | Yes, for two types of audible alarm (VCA, Temperature)<br>2 preset voice alerts (one for each)<br>6 importable user-defined voice alerts (4 options shared in the two types) |
| 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)   |

| <b>Video and Audio</b>  |   |
|-------------------------|---|
| Main Stream             | Thermal:<br>25 fps (1280 × 720, 704 × 576, 640 × 480, 352 × 288, 320 × 240)<br>Optical:<br>50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)<br>60Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)  |
| Sub-stream              | Thermal:<br>25 fps (704 × 576, 352 × 288, 320 × 240)<br>Optical:<br>50 Hz: 25 fps (704 × 576, 352 × 288)<br>60 Hz: 30 fps (704 × 480, 352 × 240)  |
| Video Compression       | Main Stream: H.265/H.264<br>Sub-Stream: H.265/H.264/MJPEG   |
| Audio Compression       | G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM   |
| <b>Network</b>          |   |
| Protocols               | IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE  |
| Network Storage         | MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)   |
| API                     | ISAPI, HIKVISION SDK, third-party management platform,  |
| Simultaneous Live View  | Up to 20 channels   |
| User/Host level         | Up to 32 users, 3 levels: Administrator, Operator, User   |
| Security                | User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering   |
| Client                  | iVMS-4200, Hik-Connect  |
| Web Browser             | Live view (plug-in allowed): Internet Explorer 11<br>Live view (plug-in free): Chrome 57.0 +, Firefox 52.0 +<br>Local service: Chrome 57.0 +, Firefox 52.0 +  |
| <b>Interface</b>        |   |
| Alarm Input             | 1, alarm input (0-5 VDC)  |
| Alarm Output            | 1, alarm output (alarm response actions configurable)   |
| Alarm Action            | SD recording/Relay output/Smart capture/FTP upload/Email linkage  |
| Audio Input             | 1, 3.5 mm Mic in/Line in interface<br>Line input: 2-2.4 V [p-p], output impedance: 1 KΩ ± 10%   |
| Audio Output            | Linear level, impedance: 600 Ω  |
| Communication Interface | 1, RJ45 10 M/100 M Self-adaptive Ethernet interface.<br>1, RS-485 interface (half duplex)   |
| <b>General</b>          |   |
| Web Client 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            | 12 VDC ± 25%, ϕ 5.5 mm coaxial power plug<br>PoE (802.3af, class 3)   |
| Power Consumption       | 12 VDC ± 25%: 0.5 A, Max. 6 W<br>PoE (802.3af, class 3): 42.5 V to 57 V, 0.14 A to 0.22 A, Max. 6.5 W   |

|                              |  |
|------------------------------|--|
| Working Temperature/Humidity | Temperature: - 40 °C to 65 °C (- 40 °F to 149 °F)<br>Humidity: 95% or less                       |
| Protection Level             | IP66 Standard<br>TVS 6000 V lightning protection, surge protection, voltage transient protection |
| Dimensions                   | 138.3 mm × 138.3 mm × 123.1 mm (5.45" × 5.45" × 4.85 ")  |
| Weight                       | 940 g (2.07 lb)  |

## DRI Range Table

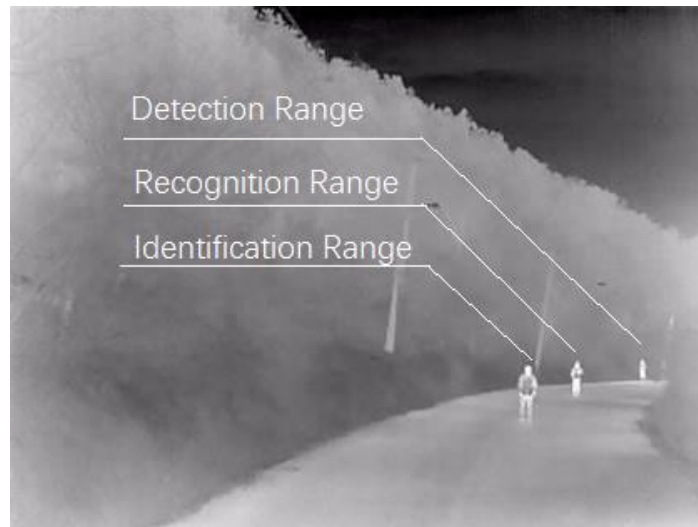
\* The table is only for reference and the performance may vary according to different environment.

\* The optimal 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<br>(Vehicles: 1.4 × 4.0 m) | Detection Range<br>(Humans: 1.8 × 0.5 m) | Recognition<br>Range (Vehicles:<br>1.4 × 4.0 m) | Recognition<br>Range (Humans:<br>1.8 × 0.5 m) | Identification<br>Range (Vehicles:<br>1.4 × 4.0 m) | Identification<br>Range (Humans:<br>1.8 × 0.5 m) |
|--|--|---|---|--|--|
| 280 m                                      | 91m                                      | 70 m  | 23 m  | 35 m   | 11 m   |

## Smart Function Table

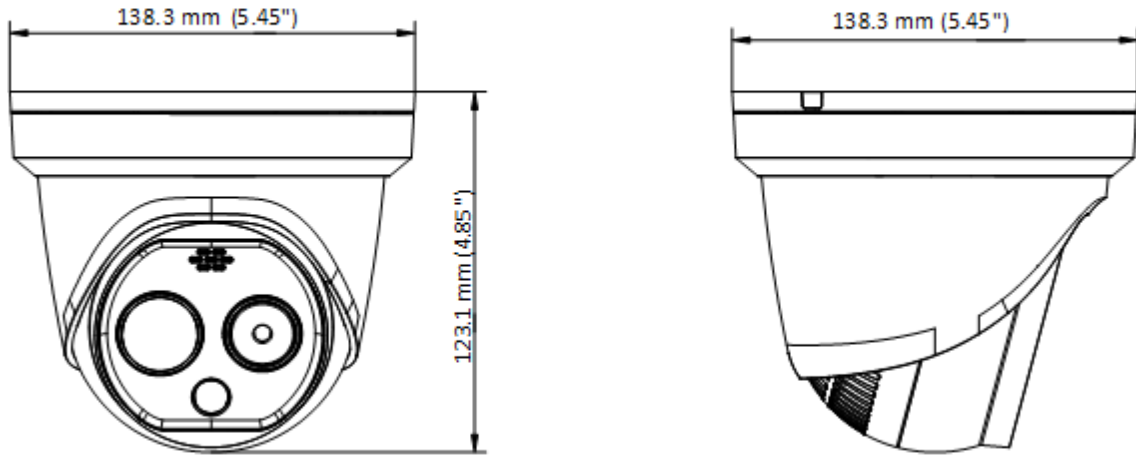
\* The table is only for reference and the performance may vary according to different environment.

| VCA Range (Vehicles: 1.4 × 4.0 m) | VCA Range (Humans: 1.8 × 0.5 m) | Temperature Measurement<br>(Object: 2 × 2 m) | Temperature Measurement<br>(Object: 1 × 1 m) |
|-----------------------------------|---------------------------------|--|--|
| 43 m                              | 15 m                            | 66 m   | 33 m   |

### ▪ Available Model

DS-2TD1217-3/QA

▪ **Dimension**



Unit: mm [Inch]

▪ **Accessory**

▪ **Optional**



DS-1273ZJ-140  
Wall Mount



DS-1273ZJ-140  
(BLACK)



DS-1280ZJ-DM21  
Junction Box



DS-1273ZJ-140B  
Wall Mount



DS-1271ZJ-140  
Pendant Mount



DS-1275ZJ-SUS  
Vertical Pole Mount



DS-1276ZJ-SUS  
Corner Mount

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