

DS-2TD1217-3/PA Thermal & Optical Network Turret Camera

DeepinView^{series}



Hikvision DS-2TD1217-3/PA Thermal & Optical Network Turret 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 fire-prevention purposes in indoor space such as engine room, ATM, conference room, warehouse, museum, train station, gem, power station, 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 less than 40 mK (25°C), F# = 1.1
- Behavior analysis function, based on deep learning algorithm: Line crossing, Intrusion, Region Entrance & Exit
- Temperature exception alarm function
- Fire detection algorithm
- Bi-spectrum image fusion, picture in picture preview
- Strobe light and audio alarm

Thermal Imaging Module Function

- 160 × 120 (the resolution of output image is 320 × 240) resolution sensor, high sensitivity sensor
- 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 | Less than 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 | F1.1 |
| Optical Module | |
| Max. Image Resolution | 2688 × 1520 |
| Image Sensor | 1/2.7" Progressive Scan CMOS |
| Min. Illumination | Color: 0.0089 Lux @ (F1.6, AGC ON), B/W: 0.0018 Lux @ (F1.6, AGC ON) |
| Shutter Speed | 1s to 1/100,000s |
| Lens (Focal Length) | 4 mm |
| Field of View | 84° × 44.8°(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 | Combines 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 totally. |
| Temperature Measurement | 3 temperature measurement rule types, 21 rules (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) |
| Fire detection | Dynamic fire point detection, up to 10 fire points detectable. |
| Infrared | |
| IR Distance | Up to 15 m |
| IR Intensity and Angle | Automatically adjusted |
| Network | |
| Main Stream | Visible Light: 50Hz: 25fps (2688 × 1520), 25fps (1920 × 1080), 25fps (1280 × 720) Visible Light: 60Hz: 30fps (2688 × 1520), 30fps (1920 × 1080), 30fps (1280 × 720) Thermal: 1280 × 720, 704 × 576, 640 × 480, 352 × 288, 320 × 240 |

| | |
|------------------------------|--|
| 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: 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 | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour |
| 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 | 1-ch inputs (0-5 VDC) |
| Alarm Output | 1-ch relay outputs, alarm response actions configurable |
| Alarm Action | SD recording/relay output/smart capture/FTP upload/email linkage/audio alarm/white light alarm |
| Audio Input | 1, 3.5 mm Mic in/Line in interface. Line input: 2 - 2.4 V [p-p], output impedance: 1 KΩ ± 10% |
| Audio Output | Linear level; impedance: 600 Ω |
| Reset | 1 Reset Button |
| 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 256 G), 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+, chrome31-44, 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 PoE (802.3af, class 3) |
| Power Consumption | 12 VDC ± 20%: 0.5 A, max. 6 W 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 | -40 °C to 65 °C (-40 °F to 149 °F) 95% or less |
| Protection Level | IP66 Standard, TVS 6000V Lightning protection, surge protection, voltage transient protection |
| Dimension | 138.3 mm × 138.3 mm × 123.1 mm (5.45" × 5.45" × 4.85") |
| Weight | 940 g (2.07 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 (Vehicles: 1.4 × 4.0 m) | VCA Range (Humans: 1.8 × 0.5 m) | Temperature Measurement (Object: 2 × 2 m) | Temperature Measurement (Object: 1 × 1 m) | Fire Detection (Object: 2 × 2 m) | Fire Detection (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 (Vehicles: 1.4 × 4.0 m) | Detection Range (Humans: 1.8 × 0.5 m) | Recognition Range (Vehicles: 1.4 × 4.0 m) | Recognition Range (Humans: 1.8 × 0.5 m) | Identification Range (Vehicles: 1.4 × 4.0 m) | Identification Range (Humans: 1.8 × 0.5 m) |
|--|--|---|---|--|--|
| 280 m | 91 m | 70 m | 23 m | 35 m | 11 m |

Available Model

DS-2TD1217-3/PA

Dimension

