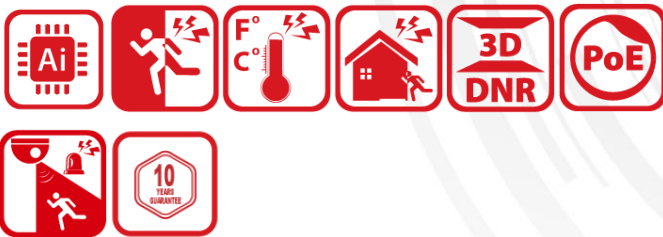# HIKMICRO

## HM-TD2628-10/G1/T3A
## Thermal & Optical Bi-spectrum Network Bullet Camera

HM-TD2628-10/G1/T3A Thermal & Optical Bi-spectrum Network Bullet Camera ssupports video analysis based on GUANLAN Large Scale AI Model for perimeter protection, and temperature exception alarm. With the deep learning algorithm, it can realize high precision VCA detection and real-time alarm. These camera series can be widely applied to villas, communities, parking lots, warehouses, construction sites, etc.

▪ **Features**

- 256 × 192 resolution, 12 μm, VOx UFPA, NETD ≤25 mK (25°C, F1.0)
- Extended human/vehicle detection distance and ultra decrease false alarm by GUANLAN Large-Scale AI Model
- Support smart hybrid light: whilte light, IR and smart mode
- Temperature exception alarm, -20 °C to 150 °C (-4 °F to 302 °F), ± 8°C (± 14.4°F)
- Support fire point detection algorithm
- Support smoking detection algorithm
- Image processing technology: linear, histogram, self-adaptive thermal AGC mode, DDE, 3D DNR
- High quality detector with 10 years guarantee

## ▪ Specification

| Thermal Module | |
|---|---|
| Image Sensor | Vanadium Oxide Uncooled Focal Plane Arrays |
| Resolution | 256 × 192 |
| Pixel Pitch | 12 μm |
| Spectral Range | 8 μm to 14 μm |
| NETD | ≤ 25 mK (25°C, F1.0) |
| Focal Length | 9.7mm |
| IFOV | 1.24mrad |
| Field of View | 18.0° × 13.5° (H × V) |
| Min. Focusing Distance | 1.5 m |
| Aperture | F1.0 |
| Digital Zoom | ×2, ×4 |

| Optical Module | |
|---|---|
| Image Sensor | 1/2.7" Progressive Scan CMOS |
| Resolution | 5MP, 2688 × 1944 |
| Min. Illumination | 0.0089Lux @(F1.6,AGC ON) ,0 Lux with IR |
| Shutter Speed | 1 s to 1/100,000 s |
| Focal Length | 12.4 mm |
| Field of View | 24.6° × 14° (H × V) |
| Aperture (Range) | F1.6 |
| WDR | 120 dB |

| Image Effect | |
|---|---|
| Bi-spectrum Image Fusion | Display the details of optical channel on thermal channel |
| Picture in Picture | Display partial image of thermal channel on the full screen of optical channel |
| Target Coloration | Yes. Supported in white hot and black hot mode. |

| Illuminator | |
|---|---|
| Light Supplement | Hybrid (IR, White light or Smart mode) |
| IR Distance | Up to 80m |

| Audible and Visual Alarm | |
|---|---|
| White Light Range | Up to 80 m |
| Visual Alarm | Yes. White light alarm with adjustable flashing frequencies |
| Audio alarm | Yes, for two types of audible alarm (VCA and Temperature Exception)<br>2 preset voice alerts (one for each)<br>6 importable user-defined voice alerts (6 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 (point, area, line), 21 rules in total |
| Temperature Range | -20 °C to 150 °C (-4 °F to 302 °F) |
| Temperature Accuracy | ±8°C (±14.4°F) |
| Fire Detection | Dynamic fire detection, up to 10 fire points detectable |
| **Video and Audio** | |
| Main Stream | Thermal: <br> 25 fps (1280 × 720, 704 × 576, 640 × 512, 320 × 240) <br><br> Optical: <br> 50 Hz: 25 fps (2688 × 1944, 2688 × 1520, 1920 × 1080, 1280 × 720) <br><br> 60Hz: 30 fps (2688 × 1944, 2688 × 1520, 1920 × 1080, 1280 × 720) |
| Sub-stream | Thermal: <br> 25 fps (704 × 576, 640 × 512, 320 × 240) <br><br> Optical: <br> 50 Hz: 25 fps (704 × 576, 352 × 288) <br><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 |
| **Video and Image** | |
| Color Palettes | 17 types (White hot, Black hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Sepia, Color 1, Color 2, Ice fire, Rain, Red hot, Green hot, Dark blue, Winter, Summer) |
| **Network** | |
| Protocols | IPv4/IPv6,HTTP,HTTPS,802.1x,Qos,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTCP,RTP,TCP,UDP,IGMP,ICMP,DHCP,PPPoE,Bonjour,SFTP,SRTP |
| Network Storage | MicroSD/SDHC/SDXC card (up to 512 G) local storage, NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR) |
| API | ISAPI, ISUP, HIKVISION SDK, and third-party management platform, Open Network Video Interface (Profile S, Profile G, Profile T, Profile M),OTAP |
| Simultaneous Live View | Up to 20 channels |
| User/Host level | Up to 32 users, 3 levels: Administrator, Operator, User |
| Security | User authentication (ID and Password), 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 + |
| **Interface** | |
| Alarm Input | 2, alarm input (0-5 VDC) |

| Alarm Output | 2, 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 K$\Omega$ $\pm$ 10% |
| Audio Output | Linear level, impedance: 600 $\Omega$ |
| Communication Interface | 1, RJ45 10 M/100 M Self-adaptive Ethernet interface.<br>1, RS-485 interface (half duplex) |
| **General** | |
| 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 $\pm$ 25%, two-core terminal block<br>PoE (802.3at, class 4) |
| Power Consumption | 12 VDC $\pm$ 25%: 1.67A to 2.5 A, max. 24W<br>PoE (802.3at, class 4): 42.5 V to 57 V, 0.56 A to 0.42 A, max. 24W |
| Working Temperature/Humidity | Temperature: -40°C to 65°C (-40°F to 149°F)<br>Humidity: 95% or less |
| Protection Level | IP67 Standard, IK10<br>TVS 6000V lightning protection, surge protection, voltage transient protection |
| Dimensions | 349.1 mm × 113 mm × 105mm |
| Weight | 1710 g |
| **Detection Range Table** | |
| VCA Range for Humans | 120 m |
| VCA Range for Vehicles | 300 m |
| **Approval** | |
| EMC | CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN50130-4: 2011+A1: 2014);<br>RCM (AS/NZS CISPR 32: 2015);<br>IC (ICES-003: Issue 7) |
| Safety | CB: IEC 62368-1: 2014+A11;<br>CE-LVD: EN 62368-1: 2014/A11: 2017;<br>BIS: IS 13252 (Part 1): 2010/ IEC 60950-1: 2005<br>LOA: SANS/IEC 60950-1 |
| Environment | CE-RoHS：2011/65/EU,<br>WEEE: 2012/19/EU,<br>Reach：Regulation(EC) No 1907/2006 |
| Protection | IP67: IEC 60529-2013<br>IK10: IEC 62262-2002 |

## ▪ Range Table
*The table is only for reference and the performance may vary according to different environment.*

| VCA Range | VCA Range | Temperature | Temperature | Fire Detection | Smoking |
|---|---|---|---|---|---|

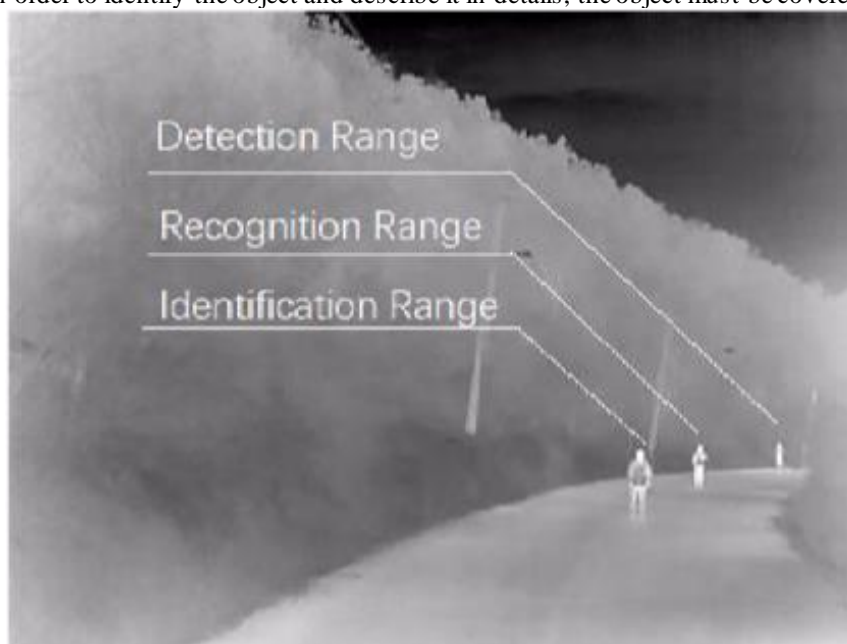| (Humans: 1.8 × 0.5 m) | (Vehicles: 1.4 × 4.0 m) | Measurement (Object: 1 × 1 m) | Measurement (Object: 0.2 × 0.2 m) | ( Object : 0.5 × 0.5m ) | Detection |
|---|---|---|---|---|---|
| 120 m | 291m | 161.7m | 32.3m | 74.4m | 14.55m |

## ▪ DORI

*The table is only for reference and the performance may vary according to different environment.*
*The optimal human 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 (Humans: 1.8 × 0.5 m) | Detection Range (Vehicles: 1.4 × 4.0 m) | Recognition Range (Humans: 1.8 × 0.5 m) | Recognition Range (Vehicles: 1.4 × 4.0 m) | Identification Range (Humans: 1.8 × 0.5 m) | Identification Range (Vehicles: 1.4 × 4.0 m) |
|---|---|---|---|---|---|
| 404m | 1239m | 101m | 310m | 50m | 155m |

## ▪ Typical Application

HIKMICRO products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

No products could be used under HYDROGEN FLUORIDE environment. This model has No Specific PROTECTION.

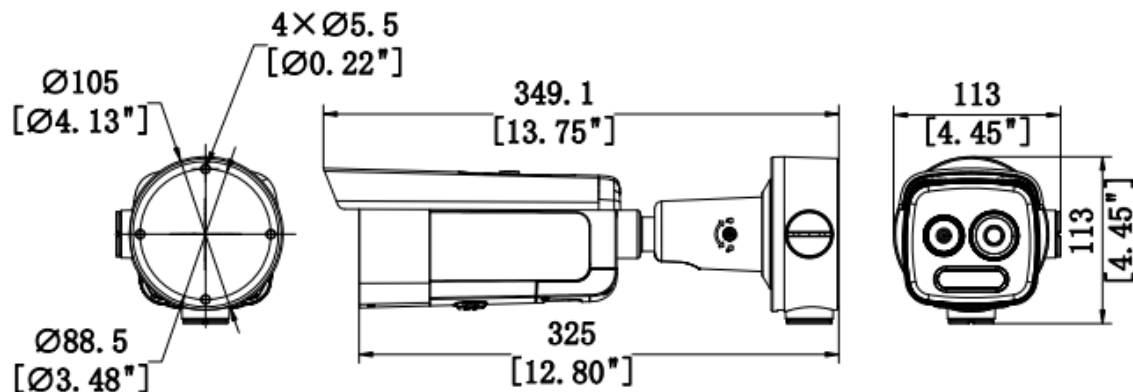| Level | Description |
|---|---|
| Top-level Protection | HIKMICRO products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Usually it is used in salt-spray and sulfur dioxide (with a concentration volume ratio of less than 0.67%) environment, such as chemical plants and coastal lines. |
| Moderate Protection | HIKMICRO products at this level are equipped for use in areas with moderate anti-corrosion demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away from coastlines, as well as areas affected by acid rain. |

| No Specific Protection | HIKMICRO products at this level are equipped for use in areas where no specific anti-corrosion protection is needed. |
|---|---|

## ▪ Available Model

HM-TD2628-10/G1/T3A

## ▪ Dimension



## ▪ Accessory

### ▪ Included

**DS-1260ZJ**
**Junction box**



### ▪ Optional

**DS-1275ZJ-S-SUS**          **DS-1276ZJ-SUS**
**Vertical pole mount**        **Corner mount**



## ▪ Note

COMPLIANCE NOTICE: The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different

countries.