

## DS-2TD8166-75C2F/V2

Thermal & Optical Bi-spectrum Network Stable PTZ Camera

DeepinView<sup>series</sup>



Hikvision DS-2TD8166-75C2F/V2 Thermal & Optical Bi-spectrum Network Stable PTZ Camera equipped with built-in GPU which support intelligent perimeter protection algorithm, can realize high precision VCA detection and real-time alarm. It is applied to frontier protection occasions, maritime protection occasions, port monitoring, airport perimeter security, 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 < 40mk (@25°C, F#=1.0)
- Smart tracking: Panorama tracking, Event tracking and Multi-scene patrol tracking
- Smart tracking linkage: thermal view and optical view
- Powerful perimeter protection algorithm: Line crossing, Intrusion, Region Entrance & Exit
- Reliable temperature exception alarm function
- Advanced fire detection algorithm

### Thermal Imaging Module Function

- 640\*512 resolution, high sensitivity sensor, support contrast adjustment
- Support shutter adjustment in various modes
- 3D DNR, 15 palettes of color adjustable, image detail enhancement



---



## **Specifications**

| Parameter      |                         | Model  | DS-2TD8166-75C2F/V2                                     |
|----------------|-------------------------|--|---|
|                |                         |  | Thermal & Optical Bi-spectrum Network Stable PTZ Camera |
| Thermal module | Image sensor            | Vanadium Oxide Uncooled Focal Plane Arrays   |   |
|                | Max. Resolution         | 640 × 512  |   |
|                | Detector Pitch          | 17μm   |   |
|                | Response waveband       | 8μm to 14μm  |   |
|                | NETD                    | < 40mk (@25°C,F#=1.0)  |   |
|                | Lens (focal length)     | 75 mm  |   |
|                | MRAD                    | 0.23 mrad  |   |
|                | Field of View           | 8.3° × 6.64°   |   |
|                | Min. Focusing Distance  | 8 m  |   |
|                | F number                | 1.0  |   |
| Optical camera | Image Sensor            | 1/2.8" Progressive Scan CMOS   |   |
|                | Min. Illumination       | Color : 0.05Lux @ (F1.8, AGC ON)<br>B/W : 0.01Lux @ (F1.8, AGC ON)   |   |
|                | Focal Length            | 6.7-330mm, 49x   |   |
|                | Digital Zoom            | 16 X   |   |
|                | Field of View           | 41.3° to 1.2° (Wide-Tele)  |   |
|                | Min. Working Distance   | 10-1500mm(Wide-Tele)   |   |
|                | Aperture Range          | F1.8-F6.1  |   |
|                | Focus Mode              | Auto / Semiautomatic / Manual  |   |
|                | WDR                     | Digital  |   |
|                | Shutter Time            | PAL: 1-1/30,000s / NTSC: 1-1/30,000s   |   |
|                | White Balance           | Auto / Manual /ATW/Indoor/Outdoor/Daylight lamp/Sodium lamp  |   |
|                | Day & Night             | IR Cut Filter  |   |
|                | Privacy Mask            | 24 privacy masks programmable; optional multiple colors and mosaics  |   |
|                | Optical Defog           | Yes  |   |
| Enhancement    | 3D DNR                  |  |   |
| Smart function | VCA                     | Support 4 VCA rule types (Line Crossing, Intrusion, Region Entrance, and Region Exiting), 10 scenes and 8 VCA rules for each scene.  |   |
|                | Temperature Measurement | Support 3 temperature measurement rule types, 273 presets as scene, 21 rules of each scene (10 points, 10 areas, and 1 line)   |   |
|                | Temperature range       | -20 °C to 150 °C (-4 °C to 302 °F)   |   |
|                | Temperature accuracy    | ± 8 °C (14.4 °F)   |   |
|                | Fire detection          | Support 10 fire points   |   |
| PTZ            | Movement Range          | Pan: 360° Continuous Rotate; Tilt: From -45 ° to + 45 ° (auto flip)  |   |
|                | Pan Speed               | Configurable, From 0.01°/s to 40°/s  |   |
|                | Tilt Speed              | Configurable, From 0.01°/s to 20°/s  |   |
|                | Proportional Zoom       | Yes  |   |
|                | Presets                 | 300  |   |
|                | Patrol Scan             | 8; Up to 32 Presets Per Patrol   |   |
|                | Pattern Scan            | 4; More Than 10 Minutes Per Pattern  |   |
|                | Power Off Memory        | Yes  |   |
|                | Park                    | Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan   |   |
|                | PT Status               | Turn On/Turn Off   |   |
|                | Scheduled Task          | Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan/Doom Reboot/Doom Adjust/Aux Output  |   |
| Network        | Main Stream             | Optical Light: 50Hz:25fps(1920×1080), 25fps(1280×960), 25fps(1280×720)<br>Optical Light: 60Hz:30fps(1920×1080), 30fps(1280×960), 30fps(1280×720)<br>Thermal: 50fps (640 × 512) |   |
|                | Sub stream              | 50Hz:25fps (704 × 576), 25fps (352 × 288), 25fps (176 × 144)<br>60Hz:30fps (704 × 480), 30fps (352 × 240), 30fps (176 × 120)<br>Thermal: 50fps (640 × 512)                     |   |
|                | Video compression       | H.265+/H.264+/H.265/H.264/MJPEG, 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,Bonjour       |
|                    | Simultaneous live view    | Up to 20-ch  |
|                    | 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 |
| <b>Integration</b> | Alarm Input               | Up to 7-ch Relay Input (0-5V DC)   |
|                    | Alarm Output              | Up to 2-ch; Support Alarm Linkage  |
|                    | Alarm Action              | Preset/Patrol Scan/Pattern Scan/SD Card Record/Relay Output/Smart capture/FTP upload/Email linkage                       |
|                    | Audio Input               | LINE_IN Input/MIC Input; Peak: From 2 to 2.4V[p-p]; Output Impedance: 1KΩ±10%  |
|                    | Audio Output              | Linear Level; Impedance: 600Ω  |
|                    | Communication Interface   | Built-in RJ45; 10M/100M Ethernet Interface   |
|                    | Onboard Storage           | Built-in 64GB SD Card; Support Manual/Alarm Recording  |
|                    | Analog Video Output       | 1.0V [p-p]/75Ω, PAL/NTSC/BNC   |
|                    | RS485                     | Half-Duplex; HIKVISION, PELCO-P and PELCO-D Self-adaptive  |
|                    | API                       | Open-ended API, support ISAPI; Support HIKVISION SDK and Third-party Management Platform                                 |
|                    | Client                    | iVMS-4200  |
|                    | Web Browser               | IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+; Multiple Languages  |
| <b>General</b>     | Menu                      | English  |
|                    | Wiper                     | Support  |
|                    | Power                     | 48V DC/5A, 220W  |
|                    | Work Temperature/Humidity | From -40°C to 60°C (-40°F to 140°F); Humidity: 90% or Less   |
|                    | Protection Level          | IP66 Standard; TVS 6000V Lightning Protection, Surge Protection and Voltage Transient Protection                         |
|                    | Dimension                 | 559.2 mm × 380 mm × 239.8 mm (22.02 '' × 14.96 '' × 9.44 '')   |
|                    | Weight                    | Approx. 42kg (92.6 lb)   |

## Wide Range Coverage for Different Specifications

**Note:** The table below is only for reference, the performance varies from model to model, and the specific data is based on 17 μm detector pitch.

| Detection Range<br>(Vehicles:<br>1.4×4.0m) | Detection Range<br>(Humans:<br>1.8×0.5m) | Recognition Range<br>(Vehicles:<br>1.4×4.0m) | Recognition Range<br>(Humans:<br>1.8×0.5m) | Identification Range<br>(Vehicles:<br>1.4×4.0m) | Identification Range<br>(Humans:<br>1.8×0.5m) |
|--|--|--|--|---|---|
| 6765m                                      | 2206m                                    | 1691m  | 551m                                       | 846m  | 276m  |

## Smart functions Range Table

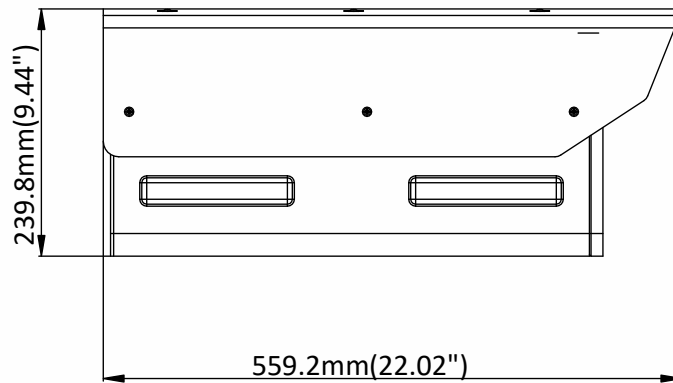
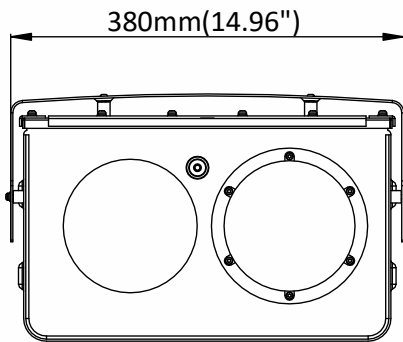
**Note:** The table below is only for reference, the performance varies from model to model, and the specific data is based on 17 μm detector pitch.

| VCA Range<br>(Vehicles:<br>1.4×4.0m) | VCA Range<br>(Humans:<br>1.8×0.5m) | 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) |
|--------------------------------------|------------------------------------|--|--|----------------------------------|----------------------------------|
| 2250m                                | 750m                               | 1775m  | 885m   | 4410m                            | 2205m                            |

## Order Models

DS-2TD8166-75C2F/V2

## Dimensions



Distributed by



## HIKVISION

### Headquarters

No.555 Qianmo Road, Binjiang District,  
Hangzhou 310051, China  
T +86-571-8807-5998  
overseasbusiness@hikvision.com

**Hikvision USA**  
T +1-909-895-0400  
sales.usa@hikvision.com

**Hikvision Europe**  
T +31-23-55-42-770  
info.eu@hikvision.com

**Hikvision Middle East**  
T +971-4-8816086  
salesme@hikvision.com

**Hikvision Russia**  
T +7-495-669-67-99  
saleru@hikvision.com

**Hikvision India**  
T +91-22-28469900  
sales@pramahikvision.com

**Hikvision Italy**  
T +39-0438-6902  
info.it@hikvision.com

**Hikvision France**  
T +33(0)1-85-330-450  
info.fr@hikvision.com

**Hikvision Spain**  
T +34-91-737-16-55  
info.es@hikvision.com

**Hikvision Poland**  
T +48-22-460-01-50  
poland@hikvision.com

**Hikvision UK**  
T +01628-902140  
support.uk@hikvision.com

**Hikvision Singapore**  
T +65-6684-4718  
sg@hikvision.com

**Hikvision Oceania**  
T +61-2-8599-4233  
salesau@hikvision.com

**Hikvision Canada**  
T +1-909-895-0400  
sales.usa@hikvision.com

**Hikvision Korea**  
T +82-31-731-8841  
sales.korea@hikvision.com

**Hikvision Brazil**  
T +55 11 3318-0050  
Latam.support@hikvision.com

**Hikvision Africa**  
T +27 (10) 0351172  
sale.africa@hikvision.com

**Hikvision Hong Kong**  
T +852-2151-1761