

Specifications

| Parameter | | Model | DS-2TD8166-100C2F |
|-----------------------|-------------------------|--|-------------------|
| | | 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) | 100 mm | |
| | MRAD | 0.17 mrad | |
| | Field of View | 6.23° × 4.98° | |
| | Min. Focusing Distance | 10 m | |
| | F number | 1.0 | |
| Optical camera | Image Sensor | 1/2.8" Progressive Scan CMOS | |
| | Min. Illumination | Color : 0.05Lux @ (F1.8, AGC ON) 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, over 256 presets as scene, 21 rules of each scene (10 points, 10 regions, 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 | |
| Network | Scheduled Task | Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan/Doom Reboot/Doom Adjust/Aux Output | |
| | Main Stream | Optical Light: 50Hz:25fps(1920×1080), 25fps(1280×960), 25fps(1280×720) Optical Light: 60Hz:30fps(1920×1080), 30fps(1280×960), 30fps(1280×720) Thermal: 50fps (640 × 512) | |
| | Sub stream | 50Hz:25fps (704 × 576), 25fps (352 × 288), 25fps (176 × 144) 60Hz:30fps (704 × 480), 30fps (352 × 240), 30fps (176 × 120) Thermal: 50fps (640 × 512) | |

| | | |
|-------------|---------------------------|--|
| | Video compression | H.264 (Baseline/Main/High Profile) / MJPEG/MPEG4 |
| | 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 |
| Integration | 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 Micro SD/SDHC/SDXC Card Slot, Up to 64GB; 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 |
| General | Menu | English |
| | Wiper | Yes |
| | 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 | 439 mm × 649 mm × 649 mm (17.28 " × 25.55 " × 25.55 ") |
| | 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.

| Lens (focal length) | 7mm | 10mm | 15mm | 25mm | 35mm | 50mm | 75mm | 100 mm |
|---------------------------------|------|------|-------|-------|-------|-------|-------|--------|
| Detection range (Vehicles) | 631m | 902m | 1353m | 2255m | 3157m | 4510m | 6765m | 9020m |
| Detection range (Humans) | 206m | 294m | 441m | 735m | 1029m | 1471m | 2206m | 2941m |
| Recognition (Vehicles) range | 158m | 225m | 338m | 564m | 789m | 1127m | 1691m | 2255m |
| Recognition (Humans) range | 51m | 74m | 110m | 184m | 257m | 368m | 551m | 735m |
| Identification (Vehicles) range | 79m | 113m | 169m | 282m | 395m | 564m | 846m | 1127m |
| Identification (Humans) range | 26m | 37m | 55m | 92m | 129m | 184m | 276m | 368m |