HIKVISION

SEE THE WORLD IN A NEW WAY
HIKVISION THERMAL CAMERAS

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)1-85-330-444
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 +44-1628-9021-4
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
Tel: +27 (10) 0351172
sale.africa@hikvision.com

Hikvision Hong Kong
T +852-2151-1761

THE BENEFITS OF THERMAL CAMERAS

All objects with a temperature above absolute zero emit thermal radiation, even at low levels. This kind of radiation, invisible to the human eye, can be detected by thermal camera sensors. The warmer an object is, the more thermal radiation it will emit. Thermal cameras can render images in the visual spectrum by detecting temperature differences between an object and its surroundings. The larger that difference is, the clearer the thermal images will be. Compared to visible-light cameras, thermal cameras can be used for applications in more challenging environments.

- Excellent Environmental Adaptability
- Advanced Detection Ability
- Temperature Sensing

Excellent Environmental Adaptability

Thermal sensors are not affected by changing light conditions, total darkness, or other challenging weather, such as rain, fog or snow. This makes thermal cameras a perfect platform on which to build more efficient, 24/7 surveillance systems.

Advanced Detection Ability

Integrated with intelligent video applications, such as line crossing or intrusion detection, these cameras can automatically trigger an alert and at the same time trigger a traditional pan / tilt / zoom camera to supply pertinent video to an operator. This application becomes especially effective in theft prevention and border enforcement applications.

Temperature Sensing

Thermal cameras can monitor temperatures of specified objects; if temperatures exceed or fall below a certain limit, an alarm will be triggered. They can also track highlighted temperature-spans in an image through isothermal palettes. This enables an interpretation of events in a scene. Thermal cameras are the ideal choice for the prevention of fires, equipment over-heating, damage caused by freezing, and many other hazards.
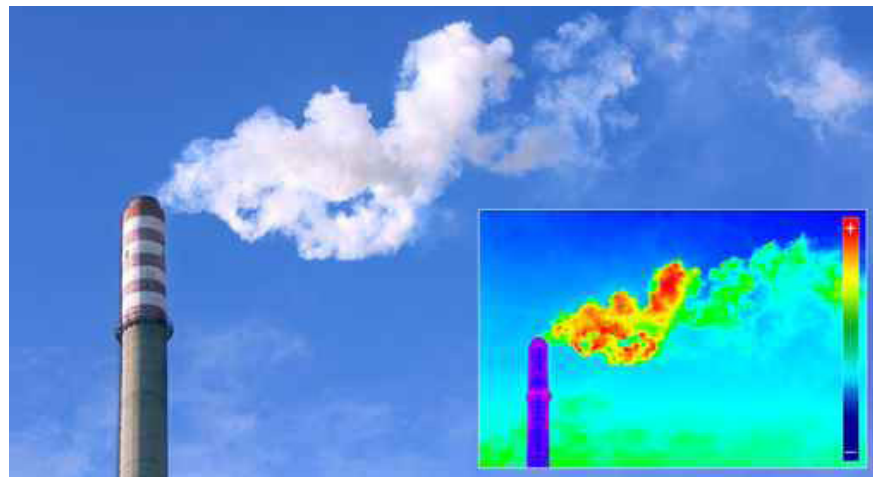
Hikvision's Thermal Technology Advantage

Image Signal Proces Algorithm	**Self-Developed Thermal Image Module, Resolutions Up to 640 x 512** ■ Auto Gain Control ■ Digital Detail Enhancement ■ 3D DNR ■ NETD < 50 mk (0.05° C)
Intelligent Behavior Analyses	**Thermal Cameras can Detect** ■ Line Crossing ■ Intrusion ■ Region Entrance & Exit
Improved Image Quality	**High Sensitivity for** ■ Temperature Anomalies ■ Accurate Thermometrics ■ Dynamic Fire Detection

Linear AGC

Adaptive AGC

Auto Gain Control (AGC):
Adjusts the dynamic range of an image & retains permeability. "Adaptive" AGC – a feature of Hikvision thermal cameras – is a more advanced algorithm than "linear" AGC, found in other manufacturers' cameras.

DDE Off

DDE On

Digital Detail Enhancement (DDE):
Based on an enhanced algorithm for a region of interest, ensures images display more details.
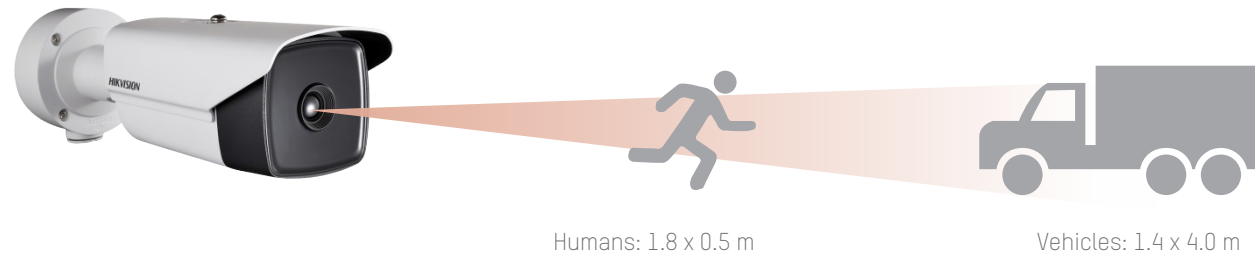
3D DNR Off

3D DNR On

3D Digital Noise Reduction (DNR):
Through noise reduction processing of the original signal, hot pixels are minimized, rendering more refined images.

Wide Coverage Range for Varying Specifications

A Wide Variety of Thermal Product Options

Combining self-developed thermal imaging technology with Hikvision's extensive experience in the video surveillance field, we are equipped to provide a full range of thermal products – all of which are able to meet our customers' various requirements.

Pixel Pitch = 25 µm

Lens (Focus)	25 mm	50 mm	75 mm
Detection Range (Vehicle)	1,533 m	3,067 m	4,600 m
Detection Range (Human)	500 m	1,000 m	1,500 m
Recognition Range (Vehicle)	383 m	767 m	1,150 m
Recognition Range (Human)	125 m	250 m	375 m
Identification Range (Vehicle)	192 m	383 m	575 m
Identification Range (Human)	63 m	125 m	188 m

Applicable Models: DS-2TD2235D-25/50; DS-2TD4035D-25/50; DS-2TD6135-50B2L/75B2L; DS-2TD6135T-25A2L/50A2L

The single-lens bullet cameras provide an economical total cost of ownership, and the dual-lens products – bullet cameras, speed domes, and positioning systems – offer pan & tilt flexibility and simultaneous video streams that include both visible light and thermal imaging.

Humans: 1.8 x 0.5 m   Vehicles: 1.4 x 4.0 m

Thus, complex functions can be achieved. For example, bi-spectrum linkage can trigger automatic optical tracking if thermal units detect a target, and the fire detection function can locate fires and auto-matically zoom in with a traditional camera for visible confirmation.

Pixel Pitch=17µm

Lens (focal length)	10 mm	15 mm	25 mm	35 mm	50 mm	75 mm
Detection range (Vehicles)	902 m	1,353 m	2,255 m	3,157 m	4,510 m	6,765 m
Detection range (Humans)	294 m	441 m	735 m	1,029 m	1,471 m	2,206 m
Recognition range (Vehicles)	225 m	338 m	564 m	789 m	1,127 m	1,691 m
Recognition range (Humans)	74 m	110 m	184 m	257 m	368 m	551 m
Identification range (Vehicles)	113 m	169 m	282 m	395 m	564 m	846 m
Identification range (Humans)	37 m	55 m	92 m	129 m	184 m	276 m

Applicable Models: DS-2TD2136-10/15/25; DS-2TD2166 (T) -15/25/35; DS-2TD6166-50B2L/75B2L; DS-2TD6166T-25A2L/50A2L,

Ranges are calculated according to Johnson's criteria in good weather conditions

To meet accurate temperature-measuring requirements, we created thermometric bullet & PTZ cameras, which support point, line, and frame temperature measurement types. Users can set upper and lower temperature limits. When the temperature exceeds set limits, an alarm will be triggered.

We have also introduced handheld thermal devices for industrial testing or outdoor activities. It's easy to carry and records precise measurements.

HIKVISION

Hikvision Thermal Camera Application Scenarios

Line Crossing Detection   Intrusion Detection
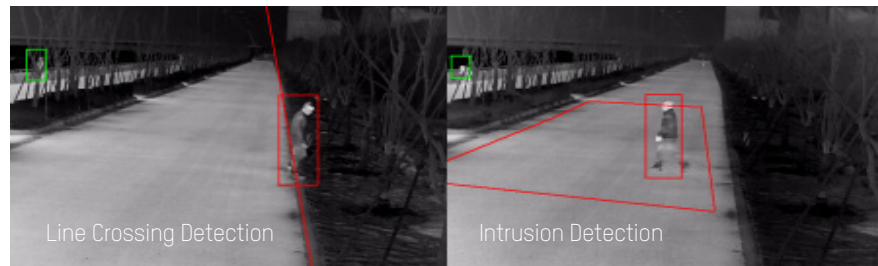
Perimeter Protection (Key-Region Intelligent Preventions)

Rapid target lock and alarm triggering, even in complete darkness and challenging conditions such as rain, smoke, dust, and snow

Protection of Borders & Coastlines

Long-range object detection,not influenced by bad weather

Fire & Theft Prevention in Warehouse Settings

Temperature anomalies, fire detection

Accurate Thermometry to Prevent Damage

Application Areas
Power Generation & Transmission
Petroleum & Petrochemical
Manufacturing Industry
Assurance of Safe Production

Handheld Applications – Easy to carry, convenient to display

Patrol
Hunting
Hiking

Current Applications

Electric temperature monitoring in energy substation – Ecuador

A total of 60 cameras were installed, providing dedicated client use for temperature measurement and monitoring, and running on a third-party grid platform.
This system implements preventive detection of operating events and monitors the main parts of the substation, such as insulators, transformers, and more. Once a device is found to exceed the normal operating temperature, alarm information is generated.

Coastal defense project – Chao Zhou, China
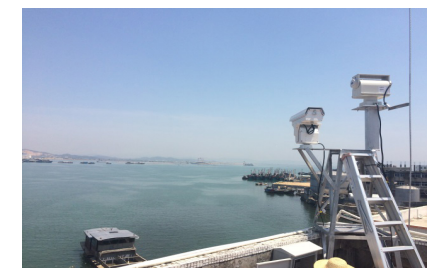
Surveillance of seafaring vessels to prevent smuggling or other violations in ocean environments is especially tough. Hikvision Thermal PTZ Cameras solve this problem, providing security personnel with sharp imaging and smart functionality.

Thermal Cameras   Thermal Cameras

PRODUCT FEATURES

Handheld Thermometric Thermal Camera
DS-2TP03-15VM/W

- Thermal resolution: 384 × 288 / 17 μm
  Visible resolution: 8 MP
- 15 mm (25°) thermal lens
- 3.5" touch screen
- -20° C – 550° C (-4° F – 1,022° F) temperature range
- Max. ± 2° C, ± 2% temperature accuracy
- 64 GB SD card
- ＞4 hours operating time on single charge
- IP66 Protection rating

Handheld Observational Thermal Camera
DS-2TS03-25UM/W
DS-2TS03-35UM/W

- Thermal resolution: 384 × 288 / 17 μm
- 25 mm (15°) or 35 mm (10°) thermal lens option
- 0.39" OLED, 1024 × 768
- 32 GB MicroSD card
- Hot-spot tracking
- Support Wi-Fi
- ＞5 hours operating time on single charge
- IP67 Protection rating
- 2 m Drop tested

Thermal Network Single-Lens Bullet Camera
DS-2TD2136-10/15/25

- Thermal resolution: 384 × 288
- 10 mm (36°) / 15 mm (24°) / 25 mm (15°) thermal lens option
- Support line crossing and intrusion detection
- Support temperature anomaly alarm
- Support fire detection

Thermal Network Single-Lens Bullet Camera
DS-2TD2166-15/25/35
DS-2TD2166T-15/25/35

- Thermal resolution: 640 × 512
- 15 mm (39°) / 25 mm (24°) / 35 mm (17°) thermal lens option
- Support line crossing and intrusion detection
- Support temperature anomaly alarm
- Support fire detection
- -T: -20° C – 550° C (-4° F – 1,022° F) temperature range, max. ± 2° C, ± 2% temperature accuracy (only DS-2TD2166T supported)
- IP66 Protection rating

PRODUCT FEATURES

Observable Thermal + Optical Bi-spectrum Network PTZ Camera
DS-2TD6135-50/75B2L
DS-2TD6166-50/75B2L

- Thermal resolution: 384 × 288 / 640 × 512
  Visible resolution: 1920 × 1080
- Visible-light lens: 8–250 mm, 32x optical zoom, 16x digital zoom
- Thermal lens: 50 mm (6135: 11°, 6166: 12.4°) / 75 mm (6135: 7.3°, 6166: 8.3°) thermal lens option
- 360° Endless pan range, +40° to -90° tilt range
- Support line crossing and intrusion detection with smart tracking linkage
- Support temperature anomaly alarm
- Support fire detection
- Up to 500 m IR distance
- IP66 Protection rating

Thermometric Thermal + Optical Bi-spectrum Network PTZ Camera
DS-2TD6135T-25/50A2L
DS-2TD6166T-25/50A2L

- Thermal resolution: 384 × 288 / 640 × 512
  Visible resolution: 1920 × 1080
- Visible-light lens: 4.5–135 mm, 30x optical zoom, 16x digital zoom
- Thermal lens: 25 mm (6135T: 21°, 6166T: 24°) / 50 mm (6135T: 11°, 6166T: 12.4°) thermal lens option
- 360° Endless pan range, +40° to -90° tilt range
- -20° C – 550° C (-4° F – 1,022° F) temperature range, max. ± 2° C, ± 2% temperature accuracy
- Support line crossing and intrusion detection with smart tracking linkage
- Support fire detection
- Up to 150 m IR distance
- IP66 Protection rating

Thermal + Optical Bi-spectrum Network Speed Dome
DS-2TD4035D-25/50

- Thermal resolution: 384 × 288
  Visible resolution: 1920 × 1080
- Visible-light lens: 4.3–129 mm, 30x optical zoom, 16x digital zoom
- Thermal lens: 25 mm (21.7°) / 50 mm (11°) thermal lens option
- 360° Endless pan range, -15° to 90° tilt range
- Support line crossing and intrusion, which can be linked to auto tracking
- Support temperature anomaly alarm
- Support fire detection
- Up to 150 m IR distance
- IP66 Protection rating

Thermal + Optical Bi-spectrum Network Bullet Camera
DS-2TD2235D-25/50

- Thermal resolution: 384 × 288
  Visible resolution: 1920 × 1080
- Visible-light lens: Darkfighter Ultra low light
- Thermal lens: 25 mm (21.7°) / 50 mm (11°) thermal lens option
- Support line crossing and intrusion
- Support temperature anomaly alarm
- Support fire detection
- Up to 120 m IR distance
- IP66 Protection rating

DS-2TD2136-10/15/25
DS-2TD2166(T)-15/25/35

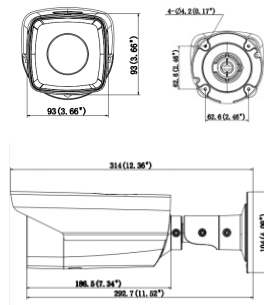(Thermometric) Thermal Network Bullet Camera

Key features

- Thermal resolution: 640 × 512
- 15 mm (39°) / 25 mm (24°) / 35 mm (17°) thermal lens option
- Support line crossing and intrusion detection
- Support temperature anomaly alarm
- Support fire detection
- -T: -20° C ~ 550° C (-4° F ~ 1,022° F) temperature range, max. ± 2° C, ± 2% temperature accuracy (only DS-2TD2166T supported)
- IP66 Protection rating

Available Models

DS-2TD2136-10
DS-2TD2136-15
DS-2TD2136-25
DS-2TD2166-15
DS-2TD2166-25
DS-2TD2166-35
DS-2TD2166T-15
DS-2TD2166T-25
DS-2TD2166T-35

Dimension (unit: mm)

Model Parameter	DS-2TD2136-10/15/25			DS-2TD2166(T)-15/25/35		
	Thermal Network Bullet Camera(Suffix "T" means thermometric model)					
Thermal Module						
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays					
Max. Resolution	384 × 288			640 × 512		
Response Waveband	8 μm to 14 μm					
NETD	< 50mk(@25℃,F/#=1.0)					
Lens (Focal Length)	10mm	15mm	25mm	15mm	25mm	35mm
MRAD	1.7	1.13	0.68	1.13	0.68	0.49
Field of View	36°×27°	24°×19°	15°×11°	39°×32°	24°×19°	17°×14°
F number	1.0					
Accurate Thermometric (Only DS-2TD2166T-15/25/35 support)						
Temperature Range	N/A			- -20 ℃ to 550 ℃ (-4 °F to 1022 °F)		
Temperature Accuracy	N/A			Max(±2 ℃，±2%)		
Temperature Measurement Type	N/A			Point/line/frame		
Network						
Max. Image Resolution	384×288			640×512		
Main Stream	60Hz:30fps(384×288)			60Hz:50fps(640×512)		
Sub Stream	60Hz:30fps(384×288)			60Hz:50fps(640×512)		
Video Compression	H.264 (Baseline/Main/High Profile) /MJPEG/MPEG4/H.264+					
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	2 inputs (0-5vDC)					
Alarm Output	2 relay outputs, alarm response actions configurable					
Alarm Action	SD recording/Relay output/Smart capture/FTP upload/Email linkage					
Audio Input	1 Mic in/Line in interface. Line input: 2-2.4V[p-p], output impedance:1KΩ±10%					
Audio Output	Line level, impedance: 600Ω					
Reset	1 Reset button					
Ethernet	1 RJ45 10M/100M Self-adaptive Ethernet interface					
SD Memory Card	Built-in Micro SD card slot, support Micro SD/SDHC/SDXC card (up to 64G), support manual/alarm recording					
Analog Video Output	1.0V[p-p] / 75Ω, PAL(or NTSC), BNC					
Application Programming	Open-ended API, support ONVIF, PSIA, CGI, HIKVISION SDK and third-party management platform					
Client	iVMS-4200					
Web Browser	IE7+, Chrome18+, Firefox5.0+, Safari5.02+					
General						
Menu Language	English					
Power	AC24V, DC12V, PoE(802.3at)					
Power Consumption	Typical 6W, 18W max(Enable lens deicing)					
Operating Conditions	-40 ℃ to 60 ℃ (-40 °F to 140 °F) , Humidity 95% or less (non-condensing)					
Protection Level	IP66 protection rating TVS 6000V lightning protection, surge protection, voltage transient protection					

DS-2TD2235D-25/50
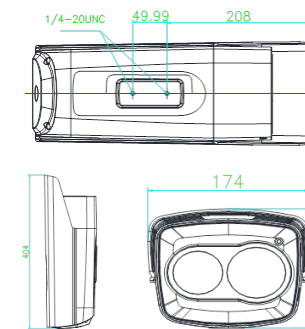
Thermal + Optical Bi-spectrum Network Bullet Camera

Key features

- Thermal resolution: 384 × 288
  Visible resolution: 1920 × 1080
- Visible-light lens: Darkfighter Ultra low light
- Thermal lens: 25 mm (21.7°) / 50 mm (11°) thermal lens option
- Support line crossing and intrusion
- Support temperature anomaly alarm
- Support fire detection
- Up to 120 m IR distance
- IP66 Protection rating

Available Models

DS-2TD2235D-25
DS-2TD2235D-50

Dimension (unit: mm)

Model Parameter	DS-2TD2235D-25	DS-2TD2235D-50
	Thermal + Optical Bi-spectrum Network Bullet Camera	
Thermal Module		
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays	
Max. Resolution	384 × 288	
Response Waveband	8-14μm	
NETD	< 50mk(@25℃,F/#=1.0)	
Lens (Focal Length)	25mm	50mm
MRAD	1.0	0.5
Field of View	21.7°x16.4°	11.0°x8.2°
F number	1.0	1.0
Network		
Max. Image Resolution	384×288 (thermal) , 1920×1080 (visible light)	
Main Stream(Thermal)	50Hz:25fps(384×288)	
Main Stream(Visible Light)	50Hz:25fps(1920×1080), 25fps(1280×960), 25fps(1280×720) 60Hz:30fps(1920×1080), 30fps(1280×960), 30fps(1280×720)	
Sub Stream(Thermal)	50Hz:25fps(160×120)	
Sub Stream(Visible Light)	50Hz:25fps(704×576), 25fps(352×288), 25fps(176×144) 60Hz:30fps(704×480), 30fps(352×240), 30fps(176×120)	
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	1 inputs (0-5vDC)	
Alarm Output	1 relay outputs, alarm response actions configurable	
Alarm Action	SD recording/Relay output/Smart capture/FTP upload/Email linkage	
Audio Input	1 Mic in/Line in interface. Line input: 2-2.4V[p-p], output impedance:1KΩ±10%	
Audio Output	Line level, impedance: 600Ω	
Ethernet	1 RJ45 10M/100M Self-adaptive Ethernet interface	
SD Memory Card	Built-in Micro SD card slot, support Micro SD/SDHC/SDXC card (up to 64G), support manual/alarm recording	
Analog Video Output	1.0V[p-p] / 75Ω, PAL(or NTSC), BNC	
RS485 Protocols	Half-duplex; HIKVISION, PELCO-P, PELCO-D, self-adaptive	
Application Programming	Open-ended API, support ONVIF, PSIA, CGI, HIKVISION SDK and third-party management platform	
Client	iVMS-4200	
Web Browser	IE7+, Chrome18+, Firefox5.0+, Safari5.02+	
Visible Light Camera		
Image Sensor	1/1.8" Progressive Scan CMOS	
Min.Illumination	Color:0.002Lux , B/W:0.0002Lux(F1.2 , AGC ON)	
Image Enhancement	BLC/3D DNR/ROI/Defog/EIS	
WDR	120dB	
Infrared		
IR Distance	120m	
IR Intensity	Automatically adjusted	
General		
Menu Language	English	
Power	AC24V, 40W max	
Operating Conditions	-40 ℃ to 65 ℃ (-40 °F to 149 °F) , Humidity 90% or less (non-condensing)	
Protection Level	IP66 protection rating TVS 6000V lightning protection, surge protection, voltage transient protection	
Weight	7 kg(approx.)	

DS-2TD4035D-25/50

Thermal + Optical Bi-spectrum
Network Speed Dome

| HD | Alarm | SD | WDR | 3D DNR |

Key features

- Thermal resolution: 384 × 288
  Visible resolution: 1920 × 1080
- Visible-light lens: 4.3–129 mm, 30x
  optical zoom, 16x digital zoom
- Thermal lens: 25 mm (21.7°) / 50 mm (11°)
  thermal lens option
- 360° Endless pan range, -15° to 90° tilt
  range
- Support line crossing and intrusion,
  which can be linked to auto tracking
- Support temperature anomaly alarm
- Support fire detection
- Up to 150 m IR distance
- IP66 Protection rating

Available Models

DS-2TD4035D-25
DS-2TD4035D-50

Dimension (unit: mm)
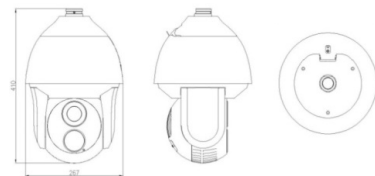
Accessories

DS-1602ZJ Long-arm wall mount

DS-1602ZJ-Pole mount

DS-1602ZJ-Box Power box mount

DS-1602ZJ-Corner mount

Hikvision Digital Technology Co., Ltd.
No. 555 Qianmo Road, Binjiang District
Hangzhou 310052, China
T +86 571 88075998
F +86 571 89935635
overseasbusiness@hikvision.com
www.hikvision.com

Model Parameter	DS-2TD4035D-25	DS-2TD4035D-50
	Thermal + Optical Bi-spectrum Network Speed Dome	
Thermal Module		
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays	
Max. Resolution	384 × 288	
Response Waveband	8 μm to 14 μm	
NETD	< 50mk(@25°C,F/#=1.0)	
Lens (Focal Length)	25mm	50mm
MRAD	1.0	0.5
Field of View	21.7°x16.4°	11.0°x8.2°
F number	1.0	
Pan/Tilt Performance		
Pan Range	Continuous 360°	
Pan Speed	Manual Control Speed: 0.1° to 160°/s	
	Preset Speed: 240°/s	
Tilt Range	-15° to +90° (auto flip)	
Tilt Speed	Manual Control Speed: 0.1° to 120°/s	
	Preset Speed: 200°/s	
Proportional Zoom	Support	
Number of Preset	300	
Patrol Scan	8 patrols, up to 32 presets per patrol	
Pattern Scan	4 patterns, with the recording time not less than 10 minutes per pattern	
Power Off Memory	Restore PTZ & Lens status after rebooting	
Park Action	Preset / Patrol scan / Pattern scan /Pan scan/Tilt scan/Random scan/Frame scan/Panorama scan	
PTZ Position Display	Turn On/Turn Off	
Preset Freezing	Support	
Scheduled Task	Preset / Patrol scan / Pattern scan /Pan scan/Tilt scan/Random scan/Frame scan/Panorama scan/Dome reboot /Dome adjust /Aux output	
Network		
Max. Image Resolution	384×288 (thermal) , 1920×1080 (visible light)	
Main Stream(Thermal)	50Hz:25fps(384×288)	
Main Stream(Visible Light)	50Hz:25fps(1920×1080), 25fps(1280×960), 25fps(1280×720)	
	60Hz:30fps(1920×1080), 30fps(1280×960), 30fps(1280×720)	
Sub Stream(Thermal)	50Hz:25fps(384×288)	
Sub Stream(Visible Light)	50Hz:25fps(704×576), 25fps(352×288), 25fps(176×144)	
	60Hz:30fps(704×480), 30fps(352×240), 30fps(176×120)	
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	7 inputs (0-5vDC)	
Alarm Output	2 relay outputs, alarm response actions configurable	
Alarm Action	Preset/Patrol/Pattern/SD recording/Relay output/Smart capture/FTP upload/Email linkage	
Audio Input	1 Mic in/Line in interface. Line input: 2-2.4V[p-p], output impedance:1KΩ±10%	
Audio Output	Line level, impedance: 600Ω	
Ethernet	1 RJ45 10M/100M Self-adaptive Ethernet interface	
Memory Card	Built-in Micro SD card slot, support Micro SD/SDHC/SDXC card (up to 64G), support manual/alarm recording	
Analog Video Output	1.0V[p-p] / 75Ω, PAL(or NTSC), BNC	
RS485 Protocols	Half-duplex; HIKVISION, PELCO-P, PELCO-D, self-adaptive	
Application Programming	Open-ended API, support ONVIF, PSIA, CGI, HIKVISION SDK and third-party management platform	
Client	iVMS-4200	
Web Browser	IE7+, Chrome18+, Firefox5.0+, Safari5.02+	
Visible Light Camera		
Sensor Type	1/2.8" progressive scan CMOS	
Focal Length	4.3mm to 129mm	
Zoom	·30X optical zoom , 16X digital zoom	
Image Enhancement	BLC/3D DNR/ROI/Defog/EIS	
WDR	120dB	
Infrared		
IR Distance	150m	
IR Intensity	Automatically adjusted, depending on the zoom ratio	
General		
Menu Language	English	
Power	AC24V, 60W max	
Operating Conditions	-40 °C to 60 °C (-40 °F to 140 °F) , Humidity 90% or less (non-condensing)	
Protection Level	IP66 protection rating	
	TVS 6000V lightning protection, surge protection and voltage transient protection	
Mount Option	Various options	
Dimensions	Φ266.6(mm)×365.2(mm)	
Weight	8kg(approx.)	

DS-2TD6135-50/75B2L
DS-2TD6166-50/75B2L

Observable Thermal + Optical Bi-spectrum Network PTZ Camera

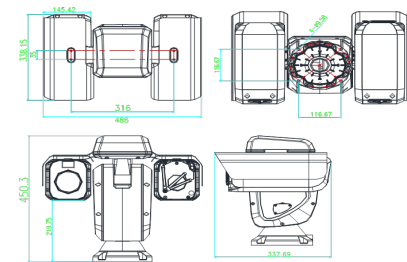| HD | Alarm | SD | WDR | 3D DNR |

Key features

- Thermal resolution: 384 × 288 / 640 × 512
  Visible resolution: 1920 × 1080
- Visible-light lens: 8–250 mm, 32x optical
  zoom, 16x digital zoom
- Thermal lens: 50 mm (6135: 11°, 6166:
  12.4°) / 75 (6135: 7.3°, 6166: 8.3°)
  thermal lens option
- 360° Endless pan range, +40° to -90° tilt
  range
- Support line crossing and intrusion
  detection with smart tracking linkage
- Support temperature anomaly alarm
- Support fire detection
- Up to 500 m IR distance
- IP66 Protection rating

Available Models

DS-2TD6135-50B2L
DS-2TD6135-75B2L
DS-2TD6166-50B2L
DS-2TD6166-75B2L

Dimension (unit: mm)

Hikvision Digital Technology Co., Ltd.
No. 555 Qianmo Road, Binjiang District
Hangzhou 310052, China
T +86 571 88075998
F +86 571 89935635
overseasbusiness@hikvision.com
www.hikvision.com

Model Parameter	DS-2TD6135-50B2L	DS-2TD6135-75B2L	DS-2TD6166-50B2L	DS-2TD6166-75B2L
	Observable Thermal + Optical Bi-spectrum Network PTZ Camera			
Thermal Module				
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays			
Max. Resolution	384 × 288		640 × 512	
Response Waveband	8 μm to 14 μm			
NETD	< 50mk(@25°C,F/#=1.0)			
Lens (Focal Length)	50mm	75mm	50mm	75mm
MRAD	0.5	0.33	0.34	0.23
Field of View	11.0°X8.2°	7.3°X5.5°	12.4°X9.9°	8.3°X6.6°
F number	1.0			
Pan/Tilt Performance				
Pan Range	Continuous 360°			
Pan Speed	Configurable, 0.1° to 110°/sec			
Tilt Range	-90° to +40°			
Tilt Speed	Configurable, 0.1° to 50°/sec			
Proportional Zoom	Support			
Number of preset	300			
Patrol Scan	8; Up to 32 Presets Per Patrol			
Pattern Scan	4; More Than 10 Minutes Per Pattern			
Power Off Memory	Restore PTZ & Lens status after rebooting			
Park Action	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan			
PTZ Position Display	Turn On/Turn Off			
Scheduled Task	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan			
Network				
Max. Image Resolution	384×288 (thermal) , 1920×1080 (visible light)		640×512 (thermal) , 1920×1080 (visible light)	
Main Stream(Thermal)	50Hz : 25fps(384 X288) or 60Hz : 30fps(384 X288)		50fps(640×512)	
Main Stream(Visible)	50Hz : 25fps(1920×1080), 25fps(1280×960), 25fps(1280×720)			
	60Hz : 30fps(1920×1080), 30fps(1280×960), 30fps(1280×720)			
Sub Stream(Thermal)	50Hz:25fps(384 X288) or 60Hz:30fps(384 X288)		50fps(640×512)	
Sub Stream(Visible)	50Hz:25fps(704×576), 25fps(352×288), 25fps(176×144)			
	60Hz:30fps(704×480), 30fps(352×240), 30fps(176×120)			
Video Compression	H.264 (Baseline/Main/High Profile) /MJPEG/MPEG4			
Audio Compression	G .711u/G.711a/G.722.1/MP2L2/G.726/AAC/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; Three Levels: Administrator, Operator and Use			
Integration				
Alarm Input	Up to 7-ch Relay Input (0-5vDC)			
Alarm Output	Up to 2-ch; Support Alarm Linkage			
Alarm Action	Preset/Patrol Scan/Pattern Scan/SD Card Record/Relay Output			
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	1 RJ45 10M/100M Self-adaptive 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; Support ONVIF,PSIA and CGI; 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			
Visible Light Camera				
Sensor Type	1/2.8" progressive scan CMOS			
Focal Length	8mm to 250mm			
Zoom	· 32X optical zoom , 16X digital zoom			
Image Enhancement	BLC/3D DNR/ROI/Defog/EIS			
WDR	120dB			
Infrared				
IR Distance	Up to 500m			
IR Intensity and Angle	Auto Adjust			
General				
Manu	English			
Power	AC24V, 120W			
Operating Conditions	-40°C to 60°C (-40 °F to 140 °F) ; Humidity 90% or Less (non-condensing)			
Protection Level	IP66 protection rating; TVS 6000V lightning protection, surge protection and voltage transient protection			

Thermal Cameras

DS-2TD6135T-25/50A2L
DS-2TD6166T-25/50A2L

Thermometric Thermal + Optical Bi-spectrum
Network PTZ Camera


HD | **Alarm** | **SD** | **WDR** | **3D DNR**

Key features

- Thermal resolution: 384 × 288 / 640 × 512
  Visible resolution: 1920 × 1080
- Visible-light lens: 4.5–135 mm, 30x optical zoom, 16x digital zoom
- Thermal lens: 25 mm (6135T: 21°, 6166T: 24°) / 50 mm (6135T: 11°, 6166T: 12.4°) thermal lens option
- 360° Endless pan range, +40° to -90° tilt range
- -20° C – 550° C (-4° F – 1,022° F) temperature range, max. ± 2° C, ± 2% temperature accuracy
- Support line crossing and intrusion detection with smart tracking linkage
- Support fire detection
- Up to 150 m IR distance
- IP66 Protection rating

Available Models

DS-2TD6135T-50B2L
DS-2TD6135T-75B2L
DS-2TD6166T-50B2L
DS-2TD6166T-75B2L

Dimension (unit: mm)
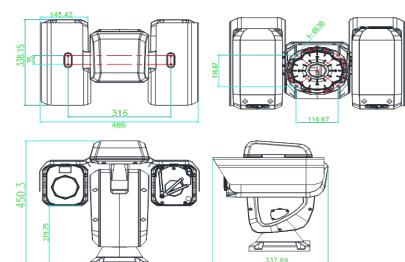
Hikvision Digital Technology Co., Ltd.
No. 555 Qianmo Road, Binjiang District
Hangzhou 310052, China
T +86 571 88075998
F +86 571 89935635
overseasbusiness@hikvision.com
www.hikvision.com

Model / Parameter	DS-2TD6135T-25A2L	DS-2TD6135T-50A2L	DS-2TD6166T-25A2L	DS-2TD6166T-50A2L
	Thermometric Thermal + Optical Bi-spectrum Network PTZ Camera			
Thermal Module				
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays			
Max. Resolution	384 X 288		640 × 512	
Response Waveband	8μm to 14 μm			
NETD	< 50mk(@25℃ , F/ # =1.0)			
Lens (Focal Length)	25mm	50mm	25mm	50mm
MRAD	1.0	0.5	0.68	0.34
Field of View	21.7°X16.4°	11.0°X8.2°	24.5°X19.7°	12.4°X9.9°
F Number	1.0			
Accurate Thermometric				
Temperature Range	· -20 °C to 550 °C (-4 °F to 1022 °F)			
Temperature Accuracy	· Max(±2 °C， ±2%)			
Temperature Measurement Type	Point/line/frame			
Pan/Tilt Performance				
Pan Range	Continuous 360°			
Pan Speed	Configurable, 0.1° to 110°/sec			
Tilt Range	-90° to +40°			
Tilt Speed	Configurable, 0.1° to 50°/sec			
Proportional Zoom	Support			
Number of preset	300			
Patrol Scan	8; Up to 32 Presets Per Patrol			
Pattern Scan	4; More Than 10 Minutes Per Pattern			
Power Off Memory	Restore PTZ & Lens status after rebooting			
Park Action	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan			
PTZ Position Display	Turn On/Turn Off			
Scheduled Task	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan			
Network				
Max. Image Resolution	384×288 (thermal) , 1920×1080 (visible light)		640×512 (thermal) , 1920×1080 (visible light)	
Main Stream(Thermal)	50Hz : 25fps(384 X288) or 60Hz : 30fps(384 X288)		50fps(640×512)	
Main Stream(Visible)	50Hz : 25fps(1920×1080)、 25fps(1280×960)、 25fps(1280×720) 60Hz : 30fps(1920×1080)、 30fps(1280×960)、 30fps(1280×720)			
Sub Stream(Thermal)	50Hz:25fps(384 X288) or 60Hz:30fps(384 X288)		50fps(640×512)	
Sub Stream(Visible)	50Hz:25fps(704×576)、 25fps(352×288)、 25fps(176×144) 60Hz:30fps(704×480)、 30fps(352×240)、 30fps(176×120)			
Video Compression	H.264 (Baseline/Main/High Profile) /MJPEG/MPEG4			
Audio Compression	G .711u/G.711a/G.722.1/MP2L2/G.726/AAC/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; Three Levels: Administrator, Operator and Use			
Integration				
Alarm Input	Up to 7-ch Relay Input (0-5vDC)			
Alarm Output	Up to 2-ch; Support Alarm Linkage			
Alarm Action	Preset/Patrol Scan/Pattern Scan/SD Card Record/Relay Output			
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	1 RJ45 10M/100M Self-adaptive 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; Support ONVIF,PSIA and CGI; 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			
Visible Light Camera				
Sensor Type	1/2.8" progressive scan CMOS			
Focal Length	4.5mm to 135mm			
Zoom	· 32X optical zoom , 16X digital zoom			
Image Enhancement	BLC/HLC/3D DNR/ROI/Defog/EIS			
WDR	120dB			
Infrared				
IR Distance	Up to 150m			
IR Intensity and Angle	Auto Adjust			
General				
Manu	English			
Power	AC24V, 120W			
Operating Conditions	-40°C to 60°C (-40 °F to 140 °F) ; Humidity 90% or Less (non-condensing)			
Protection Level	IP66 protection rating; TVS 6000V lightning protection, surge protection and voltage transient protection			