

## DS-2TD2615-xx

### Thermal and Optical Bi-Spectrum Network Bullet Camera



- **160 x 120 Thermal/1080p Optical Resolution (320 x 240 Output Image Resolution)**
- **Vanadium Oxide Uncooled Focal Plane Arrays**
- **7 mm and 10 mm Lens Options**
- **NETD <50 mk**
- **Adaptive AGC, 3D DNR**
- **Dynamic Detail Enhancement**
- **Smart Features:**
  - Line Crossing, Intrusion, Region Entrance/Exit
  - Temperature Exception
  - Advanced Fire Detection
- **Temperature Range: -4° to 1022° F (-20° to 550° C)**
- **Temperature Accuracy: Maximum ( $\pm 8^\circ \text{C}$ ,  $\pm 2\%$ )**
- **IP66 Protection**
- **24 VAC, 10 W (20 W with De-Icing Heater)**

The Hikvision DS-2TD2615-xx Thermal and Optical Bi-Spectrum Network Bullet Camera uses a vanadium oxide uncooled focal plane sensor to enhance thermal image quality.

The high sensitivity sensor has a 160 x 120 thermal/1080p optical resolution and features contrast adjustment for optimized images. AGC (Automatic Gain Control), 3D DNR (Dynamic Noise Reduction), and Dynamic Detail Enhancement further enhance image quality. Additionally, the 1080p sensor provides a matched field of view for unparalleled detailed images.

This camera also features advanced fire detection and a wide range of Smart functions, including temperature exception, line crossing, intrusion, and region entrance and exit, benefitting users with great improvements in security efficiency and, more importantly, with key events and objects being recorded for further forensic needs.

The cameras can be supplied with a 7 mm or 10 mm lens to cover a variety of needs.

#### Available Models:

DS-2TD2615-7 (7 mm lens)  
DS-2TD2615-10 (10 mm lens)



# Specifications

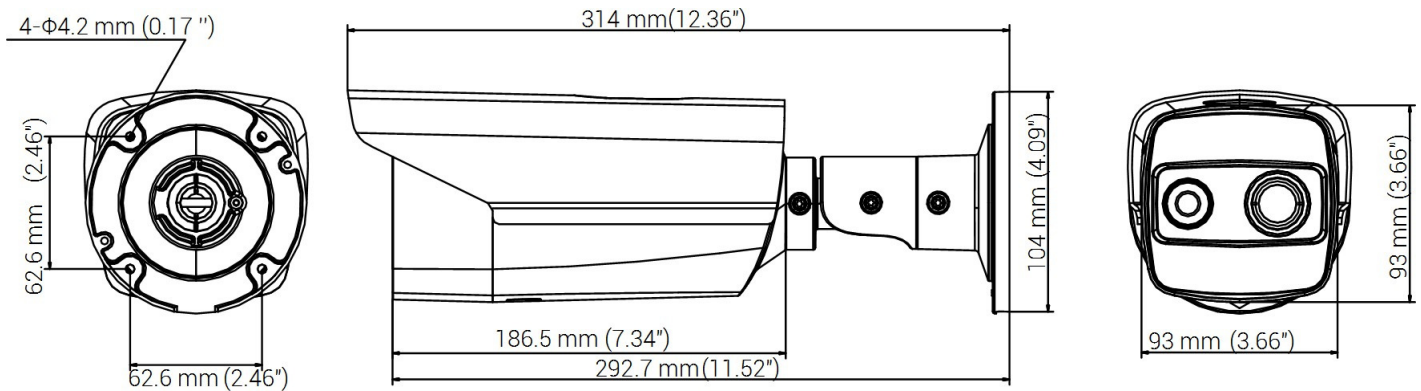
DS-2TD2615-7		DS-2TD2615-10	
<b>Thermal Module</b>			
Image Sensor	Vanadium oxide uncooled focal plane arrays		
Maximum Resolution	160 x 120 (output image resolution is 320 x 240)		
Detector Pitch	25 µm		
Response Waveband	8 µm to 14 µm		
NETD	<50 mk (@ 0.05° C, F#=1.0)		
Lens (Focal Length)	7 mm	10 mm	
MRAD	3.57 mrad	2.50 mrad	
Field of View	33.9° x 25.0°	23.3° x 17.6°	
Minimum Focusing Distance	0.8 m	1.0 m	
f/ Number	1.0		
<b>Optical Module</b>			
Maximum Image Resolution	1920 x 1080		
Image Sensor	1/2.8" progressive scan CMOS		
Minimum Illumination	Color: 0.002 lux @ (f/1.5, AGC on), B/W: 0.0002 lux @ (f/1.5, AGC on)		
Shutter Speed	1s to 1/100,000s		
Lens (Focal Length)	6 mm	8 mm	
Field of View	52.8° x 30.0° (H x V)	40.0° x 22.4° (H x V)	
WDR	Digital WDR		
Day/Night	IR cut filter with auto switch		
<b>Image Function</b>			
Spectrum Image Fusion	Thermal view can be overlaid with optical channel details		
Picture in Picture	Thermal and optical image PIP details can be combined, thermal image overlaid with optical image		
<b>Smart Function</b>			
VCA	Supports 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), and up to 8 VCA rules for each scene		
Temperature Measurement	Supports 3 temperature measurement rule types, and 21 rules (10 points, 10 regions, and 1 line) for each scene		
Temperature Range	-4° to 302° F (-20° to 150° C)		
Temperature Accuracy	±8° C (14.4° F)		
Fire Detection	Dynamic fire point detection, supports up to 10 fire points		
<b>Infrared</b>			
IR Distance	Up to 130 ft (40 m)		
IR Intensity and Angle	Auto adjust		
<b>Network</b>			
Main Stream	Optical: 50 Hz: 25 fps (1920 x 1080), 25 fps (1280 x 960), 25 fps (1280 x 720); 60 Hz: 30 fps (1920 x 1080), 30 fps (1280 x 960), 30 fps (1280 x 720) Thermal: 50 fps (160 x 120) (output image resolution is 320 x 240)		
Sub-Stream	50 Hz: 25 fps (704 x 576), 25 fps (352 x 288), 25 fps (176 x 144); 60 Hz: 30 fps (704 x 480), 30 fps (352 x 240), 30 fps (176 x 120) Thermal: 50 fps (640 x 512)		
Video Compression	H.265+/H.264+ (Baseline/Main/High Profile), H.265/H.264/MJPEG		
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, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE		
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 2-ch inputs (0 to 5 VDC)		
Alarm Output	Up to 2-ch relay outputs, alarm response actions configurable		
Alarm Action	SD recording/relay output/smart capture/FTP upload/e-mail linkage		
Audio Input	One 3.5 mm microphone in/line in interface. Line input: 2-2.4 V(p-p), output impedance: 1k Ω ±10%		
Audio Output	Linear level; impedance: 600 Ω		
Reset	One reset button		
Ethernet	One-port RJ45 10M/100M Self-adaptive Ethernet interface		
SD Memory Card	Built-in microSD/SDHC/SDXC card slot, up to 128 GB; supports manual/alarm recording		
Analog Video Output	1.0 V (p-p)/75 Ω, PAL/NTSC/BNC		
Application Programming	Open-ended API, supports ISAPI, HIKVISION SDK, and third-party management platforms		
Client	iVMS-4200		
Web Browser	IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+		
<b>General</b>			
Menu	English		
Power	24 VAC ±25%, 12 VDC ±20%, two-core terminal block PoE (802.3at, class 4)		
Power Consumption	24 VAC ±25%: 0.84 A, 12 VDC ±20%: 1.6 A, maximum 10 W (20 W with de-icing heater on), PoE (802.3at, class 4): 42.5 V to 57 V, 0.35 A to 0.47 A		
Work Temperature/Humidity	From -40° to 140° F (-40° to 65° C), humidity: 90% or less (non-condensing)		
Protection Level	IP66 standard; TVS 6000V lightning protection, surge protection and voltage transient protection		
Dimensions	12.36" x 4.09" x 4.09" (314 mm x 104 mm x 104 mm)		
Weight	3.42 lbs (1.55 kg)		

# Range Performance<sup>1</sup>

Standard Range Table	Model			
	DS-2TD2615-7		DS-2TD2615-10	
Johnson Criteria	Human	Vehicle	Human	Vehicle
Detection	460 ft (140 m)	1,407 ft (429 m)	656 ft (200 m)	2,011 ft (613 m)
Recognition	115 ft (35 m)	351 ft (107 m)	164 ft (50 m)	502 ft (153 m)
Identification	59 ft (18 m)	176 ft (53.7 m)	82 ft (25 m)	253 ft (77 m)

Smart Functions Range Table	Object	Model	
		DS-2TD2615-7	DS-2TD2615-10
Line Cross/Intrusion/Region Entrance-Exit	Human	230 ft (70 m)	328 ft (100 m)
Optimized to Johnson Criteria (Recognition)	Vehicle	643 ft (196 m)	919 ft (280 m)
Temperature Exception	Size of Point	Max Range	Max Range
Accuracy at 5 x 5 pixels	2 m x 2 m	367 ft (112 m)	525 ft (160 m)
	1 m x 1 m	183 ft (56 m)	263 ft (80 m)
Advanced Fire Detection	Size of Point	Max Range	Max Range
Accuracy at 2 x 2 pixels	2 m x 2 m	919 ft (280 m)	1,312 ft (400 m)
	1 m x 1 m	459 ft (140 m)	656 ft (200 m)

## Dimensions



<sup>1</sup> Range performance values are calculated under ideal conditions and are not a guarantee of performance.