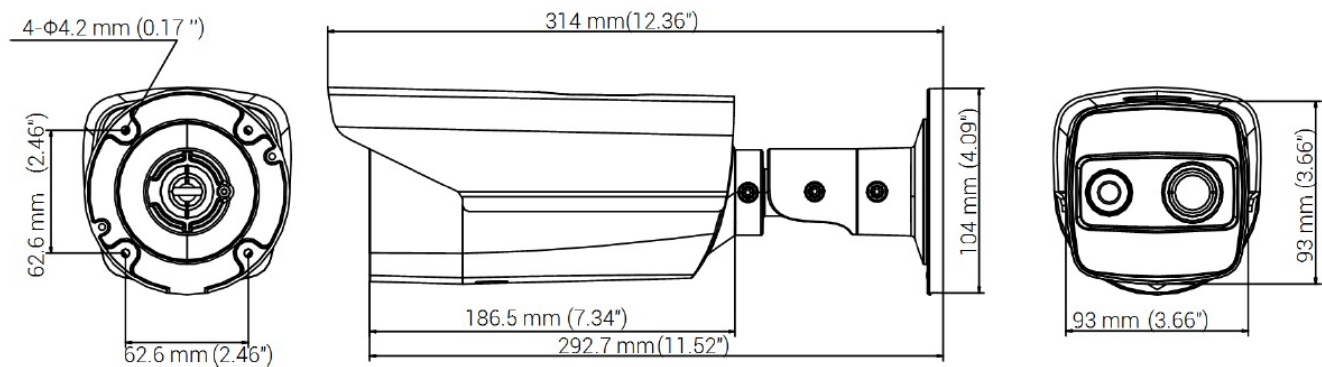


## Thermal & Optical Dual Lens Network Bullet Camera

- 160 x 120 Thermal/1080P Optical Resolution
- Athermalized Lens (Thermal)
- Advanced Fire Detection Algorithm
- Focal Length: 7mm Thermal; 6mm Optical
- Bi-spectrum Image Fusion
- Smart Features
- Digital zoom up to x8
- Image detail enhancement



### Dimensions (mm)



\* This optical camera model is not compatible with STORM brand video recorders.

## Technical Specifications

Optical Module					
Image Sensor		1/2.8" progressive scan CMOS			
Effective Pixels		1920(H) x 1080(V)			
Lens (Focal Length)		8 mm			
Field of View		40.0° x 22.4°(H x V)			
Electronic Shutter Speed		1s to 1/100,000s			
Minimum Illumination		Color: 0.002 Lux at (F1.5,AGC ON), B/W: 0.0002 Lux at (F1.5, AGC ON)			
Wide Dynamic Range		Digital WDR			
Day/Night		IR cut filter with auto switch			
Thermal Module					
Image Sensor		Vanadium Oxide Uncooled Focal Plane Arrays			
Effective Pixels		160 x 120 (the resolution of output image is 320 x 240)			
Lens (Focal Length)		10 mm			
Pixel Interval		25µm			
Response Waveband		8µm to 14µm			
NETD		<50 mk (0.05° C), F#=1.0)			
MRAD		2.50 mrad			
Field of View		23.3° x 17.6° (H x V)			
Min. Focusing Distance		1.0 m			
Aperture		F1.0			
Features					
Bi-spectrum Image Fusion		Fusion view of thermal view and overlaid details of the optical channel			
Picture in Picture		Combines details of thermal and optical image PIP, overlay thermal image on optical image			
IR Distance		Up to 40 m			
IR Intensity and Angle		Automatically adjusted			
DORI	Lens	Detect	Observe	Recognize	Identify
Distance	7 mm	656.17 ft (200 m)	-	115 ft (164.04 m)	82.02 ft (25 m)
Video					
Compression		H.265/ H.264/ MJPEG, H.265+/ H.264+ encoding with Baseline/ Main/ High Profile			
Main Stream		Visible Light: 50Hz: 25fps (1920 x 1080), 25fps (1280 x 960), 25fps (1280 x 720) Visible Light: 60Hz: 30fps (1920 x 1080), 30fps (1280 x 960), 30fps (1280 x 720) Thermal: 50fps (160 x 120 (the resolution of output image is 320 x 240))			
Sub Stream		Visible Light: 50Hz: 25fps (704 x 576), 25fps (352 x 288), 25fps (176 x 144) Visible Light: 60Hz: 30fps (704 x 480), 30fps (352 x 240), 30fps (176 x 120) Thermal: 50fps (160 x 120 (the resolution of output image is 320 x 240))			
Audio					
Compression		G.711u/ G.711a/ G.722.1/ MP2L2/ G.726/ PCM			

\* Design and specifications are subject to change without notice.

## Technical Specifications

Intelligent Functions	
VCA (Video Content Analysis)	4 VCA rule types (Line Crossing, Intrusion, Region Entrance, and Region Exiting), up to 8 VCA rules.
Temperature Measurement	3 temperature measurement rule types, 21 rules (10 points, 10 regions, and 1 line).
Temperature Range	-20 °C to +150 °C (-4 °F to +302°F)
Temperature Accuracy	± 8 °C (± 14.4 °F)
Fire detection	Dynamic fire point detection, up to 10 fire points detectable.
Network	
Ethernet	1 RJ45 10M/100M Self-adaptive Ethernet interface
Protocol	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
Maximum User Access	Up to 32 with 3 levels of user : Administrator, Operator, User
Security Measures	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x access control, IP address filtering
Interface	
Alarm Input	2 channels inputs (0-5vDC)
Alarm Output	2 channels relay outputs, alarm response actions configurable
Alarm Action	SD recording/Relay output/Smart capture/FTP upload/Email linkage
Audio Input	1 3.5mm Mic in/Line in interface. Line input: 2-2.4V[p-p], output impedance: 1KΩ±10%
Audio Output	Linear Level; Impedance: 600Ω
Reset	1 Reset Button
SD Memory Card	Built-in Micro SD card slot, support Micro SD/ SDHC/ SDXC card (up to 128G), support manual/ alarm recording
Analog Video Output	1.0V [p-p]/75Ω, PAL/ NTSC/ BNC
Client	iVMS-4200
Web Browser	IE9+, chrome31-chrome44, Firefox 30-Firefox51, Safari 5.02+(mac)
General	
Power Supply	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, max. 10W (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
Working Environment	-40° C ~ +60° C (-40° F ~ +140° F) / Less than 90% RH
Ingress Protection	IP66 TVS 6000V Lightning protection, surge protection, voltage transient protection
Weight	Approx. 1.55Kg (3.42lb)
Dimensions	314 mm × 104 mm × 104 mm (12.36" × 4.09" × 4.09")

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