



# BI-SPECTRAL BULLET CAMERA (3.5, 7, 10MM)

## PRODUCT INFO

### PRODUCT NAME

Bi-spectral Bullet Camera

### PRODUCT NUMBER

IIS-BB2519-3.5 || IIS-BB2519-7 || IIS-BB2519-10

### PRODUCT CATEGORY

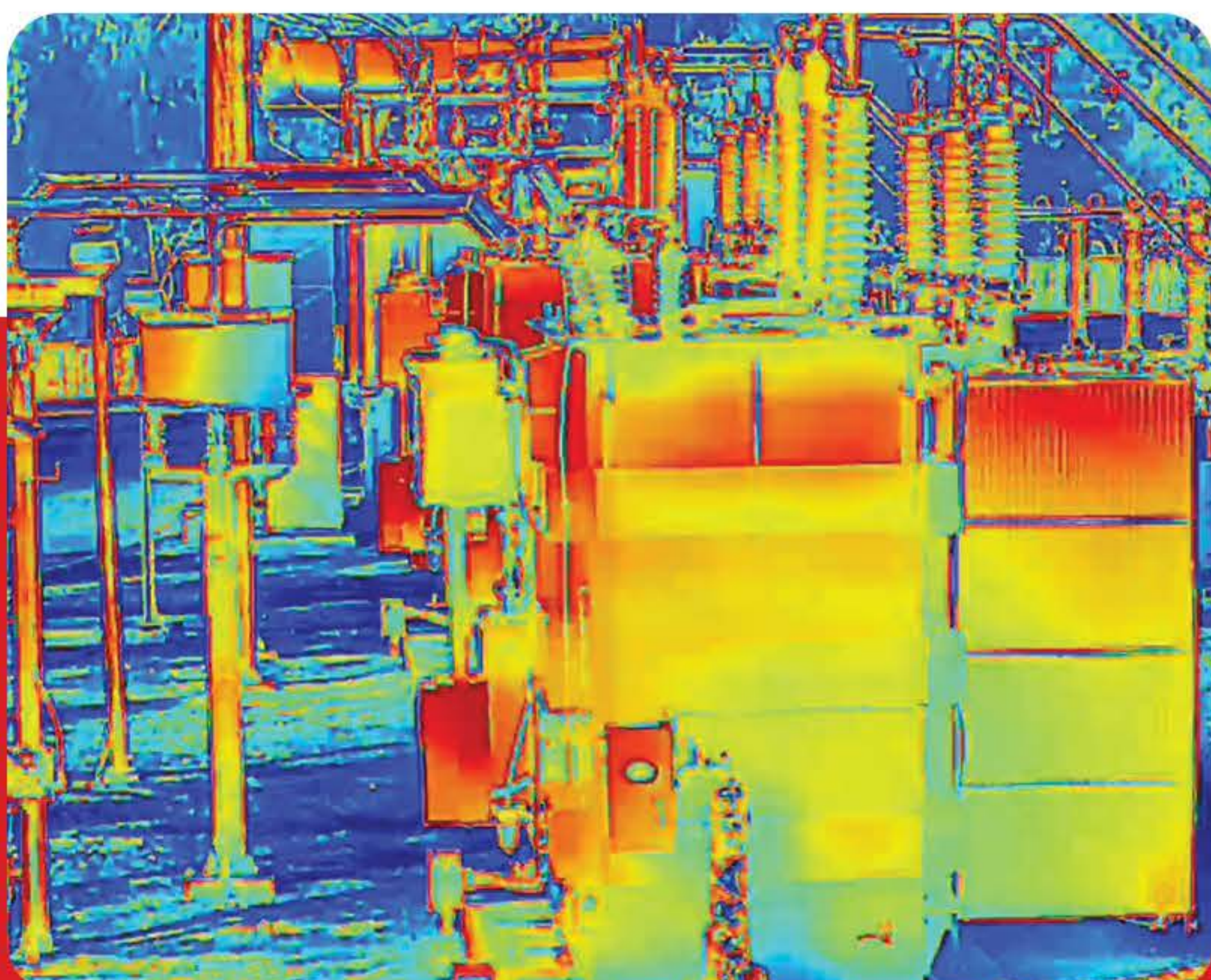
Fixed Camera

### PRODUCT PRICE

Contact us for a quote

## KEY FEATURES

- 256 x 192 resolution, 12 m, VOx UFPA, NETD  $\leq$  50 mK
- Lens Options: Thermal - 3.5mm/7mm/10mm fixed; Visible - 4mm/8mm fixed
- Detection Capabilities: Human/vehicle, smoke & flame, fire point detection
- Intelligent Analytics: Intrusion, single/double line crossing, loitering, wrong-way, object left
- Support 3 temperature measurement rule types (spot, line, area)
- Temperature Monitoring & Alarm: -20°C to 150°C (-4°F to 302°F), Accuracy:  $\pm$ 2°C /  $\pm$ 2%
- Built-in speaker and strobe light; sound and LED alarm
- Smart IR range up to 35m/50m
- Support I/O alarm, RS485, built-in SD card slot
- Power Supply: DC12V/DC24V, PoE



## A MODERN UPGRADE TO ASSET MONITORING AND PERIMETER SECURITY

The SYTIS Bi-spectral Bullet Camera combines radiometric, infrared thermal imaging with a high-resolution 8MP optical lens to deliver unmatched visibility in any environment—day or night, through rain, fog or smoke. With its thermal lens options, this camera is optimized for mid-range asset monitoring and perimeter protection, offering precise heat detection alongside crisp visual context for fast, informed decision-making.

Equipped with advanced onboard analytics with machine learning, the camera can intelligently detect and classify human and vehicle intrusions, reducing false alarms and enhancing situational awareness. Seamless integration with our InfraSpec™ software provides remote access via VMS, web, satellite and mobile—ensuring 24/7 operational oversight from anywhere.

## CONTACT US

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# TECHNICAL DATA SPECIFICATION

CAMERA	THERMAL	VISIBLE
Image Sensor	Uncooled VOx Focal Plane Arrays	1/2.7" CMOS
Resolution	256(H)×192(V), Image can be scaled up to 704×576	2880(H) × 1620(V)
Pixel Pitch	12 micrometers	
Spectral Range	8-14um	
NETD	≤ 50mK	
Min. Illumination		Color: 0.05Lux @(F1.6, AGC ON), B/W: 0.005Lux @(F1.6, AGC ON), 0Lux with IR
Shutter Speed		1/5 to 1/20,000s
Lens Type	Fixed	Fixed
Focal Length	3.5 mm, 7mm, 10mm optional	4 mm, 8 mm optional
Max. Aperture	F1.0	F1.6/F2.0
Focus Control	Fixed focal	Fixed focal
Field of View (FOV)	3.5 mm: H: 48°, V: 36° 7 mm: H: 24°, V: 18° 10 mm: H: 17°, V: 13°	4 mm: H: 92°, V: 46° 8 mm: H: 40°, V: 20°

IVS		
AI Multi-Target	Human and vehicle detection	Human and vehicle detection
Intelligent Analysis	Intrusion, Single Line Crossing, Double Line Crossing, Loitering, Wrong-Way Detection, Enter Area, Leave Area, Smart Motion Detection Support alarm triggering by specified target types (human and vehicle)	Intrusion, Single Line Crossing, Double Line Crossing, Loitering, Wrong-Way Detection, Enter Area, Leave Area, Smart Motion Detection, Object Left Support alarm triggering by specified target types (human and vehicle)
Smoke and Flame Detection	Supported	Supported
Fire Spot Detection	Supported	
People Counting	Supported	Supported

VIDEO AND AUDIO		
Main Stream	D1 (704×576) @25/30fps	2880×1620, 2560×1440, 2304×1296, 1920×1080, 1280×720 @25fps
Sub Stream	D1, CIF, 256×192 @25/30fps	D1, VGA @25fps
Bit Rate Control	CBR/VBR	CBR/VBR
Bit Rate	Main Stream: 100Kbps to 3Mbps, Sub Stream: 10Kbps to 3Mbps	Main Stream: 100Kbps to 12Mbps, Sub Stream: 10Kbps to 6Mbps
Smart Encode	Supported	Supported
Audio Compression	G.711 A-law, G.711 μ-law, RAM PCM	G.711 A-law, G.711 μ-law, RAM PCM

IMAGE		
Image Setting	Brightness, Contrast, Sharpness	Brightness, Saturation, Contrast, Sharpness
Mirror	Horizontal / Vertical / Horizontal+Vertical	Horizontal / Vertical / Horizontal+Vertical
Pseudo-color Setting	Up to 17 colors(White-hot/Black-hot/Rainbow/Iron red/HSV/Bone/Cool/Copper/Fire-hot/Pink /Spring/Summer/Autumn/Winter/Jet/Flame /Rose-Bengal)	
FFC Control	Auto / Manual	
Gain Control		Auto / Manual
White Balance		Auto/Tungsten/Fluorescent/Daylight/Shadow
Day/Night		Day Mode/Nightmode/Time
Noise Reduction	2D/3D DNR	2D/3D DNR
Image Enhancement		WDR, HLC, BLC
Wide Dynamic Range		True WDR 120dB
OSD	Up to 8 OSD	Up to 8 OSD
Privacy Masking	Up to 4 areas	Up to 4 areas
Illuminator		IR Range: -4 mm: Up to 35m (114.83 ft.) -8 mm: Up to 50m (164.04 ft.)

## THERMAL FUNCTION

Temperature Range	-20°C to 150°C (-4°F to 302°F)
Accuracy	±2°C / ±2%
Temperature Detection	3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line)
Temperature Display	Display in the lower left corner; follow the cursor display of the highest temperature, lowest temperature or average temperature
Image Fusion	Fusion view of thermal view and overlaid details of the optical channel

## EVENT

Alarm Triggers	IVS, Temperature anomaly, Motion detection, Alarm Input, Disk alarm, Network alarm, Abnormal sounddetection
Alarm Events	Alarm out, Audio alarm, Flashing light alarm, Alarm record, SMTP, FTP upload

## NETWORK

Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPOE, RTSP/RTP/RTC, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, 802.1x, SNMP, Multicast
Compatible Integration	ONVIF (Profile S/T/G/M), CGI, SDK
User/Host Level	Up to 10 users, 3 levels: Administrator, Operator, Media user
Security	IP address filter, encrypted HTTPS, Illegal login lock, IEEE 802.1x
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge

## INTERFACE

Network Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector
Audio Interface	1ch input, 1ch output
Built-in Speaker	Supported
Alarm Interface	2ch input, 2ch output
RS-485	1
SD Card Slot	Support Micro SD card, up to 512GB
Reset Button	Supported

## GENERAL

Web Language	English, Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian. Default: English
Power Supply	12 VDC/24 VDC/PoE (802.3af)
Power Consumption	Max 12W
Working Temp. and Humidity	-40°C to 60°C (-40°F to 140°F) Less than 90% RH
Certifications	CE-EMC (EN 55032:2015+A1:2020, EN 55035:2017+A11:2020, EN 50130-4:2011+A1:2014, EN 61000-6-3:2007+A1:2011+AC:2012, EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1:2019)) FCC (FCC 47 CFR 15, Subpart B, ANSI C63.4-2014)
Ingress Protection	IP66
Material	Metal
Dimensions	303 × 95 × 107mm (11.93 × 3.74 × 4.21 inch)
Net Weight	1.35 Kg (2.98 lb)



# THERMAL DRI RANGE TABLE

**Note:** The table is only for reference and the performance may vary according to different environment.

**Note:** The optimal detection, recognition, and identification distances are calculated according to Johnson's Criteria.

## THERMAL DRI RANGE TABLE

Lens	3.5mm	7mm	10mm
Detection Distance (Humans: 1.8 x 0.5 m)	146 m (479.0 ft)	292 m (958.0 ft)	417 m (1,368.1 ft)
Detection Distance (Vehicles: 1.5 x 4 m)	447 m (1,466.5 ft)	894 m (2933.1 ft)	1,278 m (4,192.9 ft)
Recognition Distance (Human: 1.8 x 0.5 m)	36 m (118.1 ft)	73 m (239.5 ft)	104 m (341.2 ft)
Recognition Distance (Vehicles: 1.5 x 4 m)	112 m (367.5 ft)	224 m (734.9 ft)	319 m (1,046.5 ft)
Identification Distance (Human: 1.8x0.5 m)	18 m (59 ft)	36 m (118.1 ft)	52 m (170.6 ft)
Identification Distance (Vehicles: 1.5 x 4 m)	56 m (183.7 ft)	112 m (367.5 ft)	160 m (524.9 ft)

# THERMAL SMART DETECTION RANGE TABLE

**Note:** The table is for reference only. The distances within it are subject to actual conditions including atmospheric conditions, target size, the installation site and more.

## DETECTION RANGE TABLE

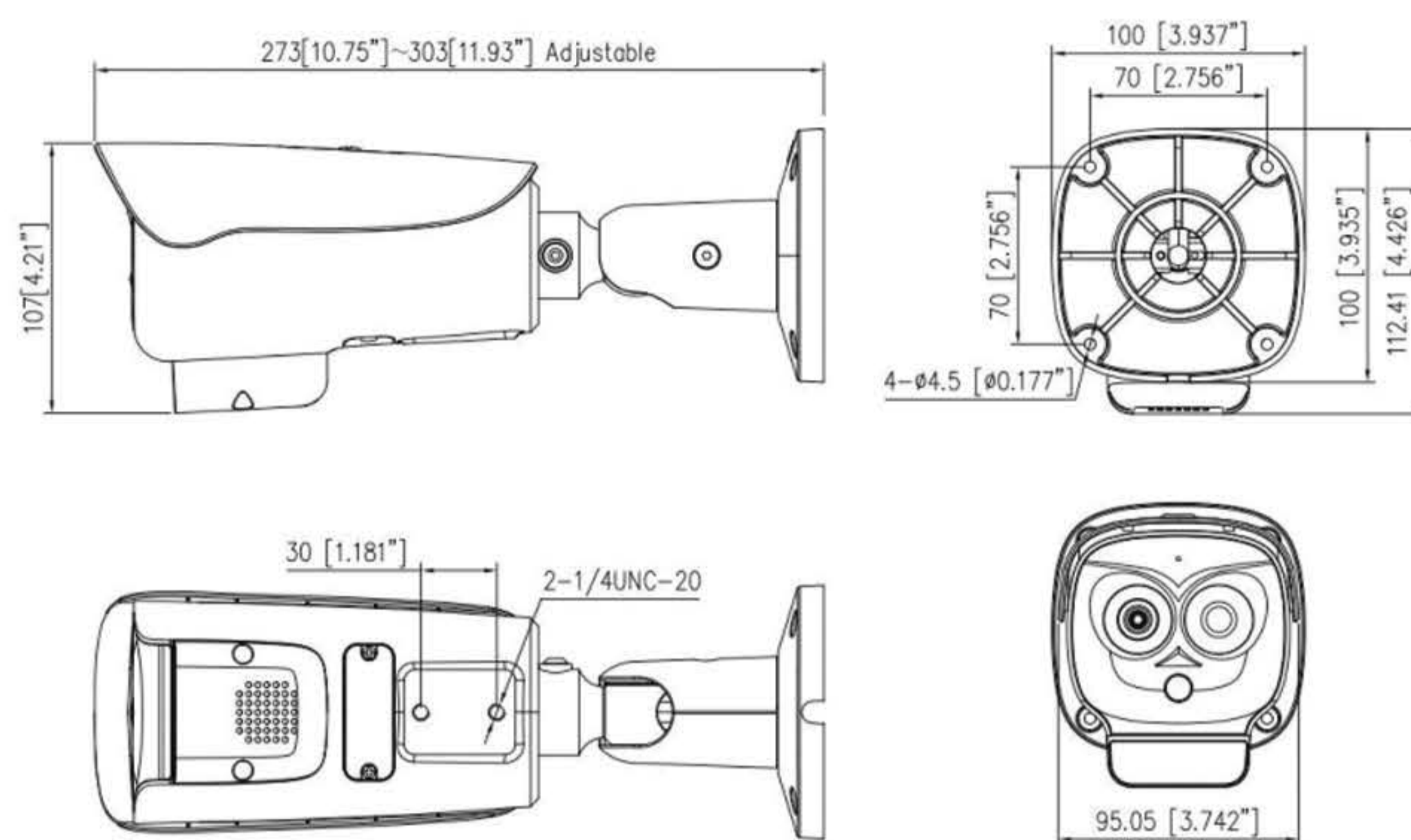
Lens	3.5mm	7mm	10mm
VCA Detection Distance (Human: 1.8 x 0.5 m)	30 m (98.4 ft)	60 m (196.9 ft)	103 m (337.9 ft)
VCA Detection Distance (Front/Rear of Vehicle: 1.5x4m)	35 m (114.8 ft)	70 m (229.7 ft)	230 m (754.6 ft)
Temperature Measurement (Object: 1 x 1 m)	58.3 m (191.3 ft)	116.7 m (382.9 ft)	166.7 m (546.9 ft)
Temperature Measurement (Object: 0.2 x 0.2 m)	11.7 m (38.4 ft)	23.3 m (76.4 ft)	33.3 m (109.3 ft)
Fire Detection (Object: 0.2 x 0.2 m)	29.2 m (95.8 ft)	58.3 m (191.3 ft)	83.3 m (273.3 ft)

**Note:** DORI (Detect, Observe, Recognize, and Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.

## DORI DISTANCE

Lens	4mm	8mm
Detect	85.4 m (280.18 ft)	150.4 m (493.44 ft)
Observe	34.2 m (112.20 ft)	60.2 m (197.51 ft)
Recognize	17.1 m (56.10 ft)	30.1 m (98.75 ft)
Identify	8.5 m (27.89 ft)	15.0 m (49.21 ft)

## Dimensions (mm)



## Accessories (optional)



Junction Box



Pole Mount



Corner Mount



Pole Mount

