Thermal & Optical Bi-spectrum Network Bullet Camera

CMIP9T42W2-97M





Thermal & Optical Bi-spectrum Network Bullet Camera supports video analysis based on Large Scale AI Model for perimeter protection, and temperature exception alarm. With the deep learning algorithm, it can realize high precision VCA detection and real-time alarm. These camera series can be widely applied to villas, communities, parking lots, warehouses, construction sites, etc.

▪ Features

- 256 × 192 thermal resolution with 12 μm VOx UFPA and NETD ≤25 mK (@25°C, F1.0)
- Large-Scale AI Model enables longer-range human/vehicle detection with ultra-low false alarms
- Support smart hybrid light: white light, IR and smart mode
- Temperature exception alarm supports -4 °F to 302 °F (-20 °C to 150 °C), ± 14.4°F (±8°C) accuracy
- Support fire point detection algorithm
- Support smoking detection algorithm
- Advanced thermal image processing with linear, histogram, self-adaptive AGC, DDE, and 3D DNR

▪ Specification

Thermal Module	
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	256 × 192
Pixel Pitch	12 μm
Spectral Range	8 μm to 14 μm
NETD	≤25 mK (25°C, F1.0)
Focal Length	9.7mm
IFOV	1.24mrad
Field of View	18.0° × 13.5° (H × V)
Min. Focusing Distance	1.5 m
Aperture	F1.0
Digital Zoom	×2, ×4
Optical Module	
Image Sensor	1/2.7" Progressive Scan CMOS
Resolution	5MP, 2688 × 1944
Min. Illumination	0.0089Lux @(F1.6,AGC ON) ,0 Lux with IR
Shutter Speed	1 s to 1/100,000 s
Focal Length	12.4 mm
Field of View	24.6° × 14° (H × V)
Aperture (Range)	F1.6
WDR	120 dB
Image Effect	
Bi-spectrum Image Fusion	Display the details of optical channel on thermal channel
Picture in Picture	Display partial image of thermal channel on the full screen of optical channel
Target Coloration	Yes. Supported in white hot and black hot mode.
Illuminator	
Light Supplement	Hybrid (IR, White light or Smart mode)
IR Distance	Up to 262 ft (80m)
Audible and Visual Alarm	
White Light Range	Up to 262 ft (80m)
Visual Alarm	Yes. White light alarm with adjustable flashing frequencies
Audio alarm	Yes, for two types of audible alarm (VCA and Temperature Exception) 2 preset voice alerts (one for each) 6 importable user-defined voice alerts (6 options shared in the two types)
Smart Function	
VCA	4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total.
Temperature Measurement	3 temperature measurement rule types (point, area, line), 21 rules in total
Temperature Range	-4 °F to 302 °F (-20 °C to 150 °C)

Temperature Accuracy	±14.4°F (±8°C)
Fire Detection	Dynamic fire detection, up to 10 fire points detectable
Direct Search	Only supported by the visible-light lens
Video and Audio	
Main Stream	Thermal: 25 fps (1280 × 720, 704 × 576, 640 × 512, 320 × 240) Optical: 50 Hz: 25 fps (2688 × 1944, 2688 × 1520, 1920 × 1080, 1280 × 720) 60Hz: 30 fps (2688 × 1944, 2688 × 1520, 1920 × 1080, 1280 × 720)
Sub-stream	Thermal: 25 fps (704 × 576, 640 × 512, 320 × 240) Optical: 50 Hz: 25 fps (704 × 576, 352 × 288) 60 Hz: 30 fps (704 × 480, 352 × 240)
Video Compression	Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG
Audio Compression	G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM
Video and Image	
Color Palettes	17 types (White hot, Black hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Sepia, Color 1, Color 2, Ice fire, Rain, Red hot, Green hot, Dark blue, Winter, Summer)
Network	
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,SFTP,SRTP
Network Storage	MicroSD/SDHC/SDXC card (up to 512 G) local storage, NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)
API	ISAPI, ISUP, LTS SDK, and third-party management platform, Open Network Video Interface (Profile S, Profile G, Profile T, Profile M), OTAP
Simultaneous Live View	Up to 20 channels
User/Host level	Up to 32 users, 3 levels: Administrator, Operator, User
Security	User authentication (ID and Password), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering
Client	NVMS V3, LTS Connect
Web Browser	Live view (plug-in allowed): Internet Explorer 11 Live view (plug-in free): Chrome 57.0 +, Firefox 52.0 + Local service: Chrome 57.0+, Firefox 52.0 +
Interface	
Alarm Input	2, alarm input (0-5 VDC)
Alarm Output	2, alarm output (alarm response actions configurable)
Alarm Action	SD recording/Relay output/Smart capture/FTP upload/Email linkage
Audio Input	1, 3.5 mm Mic in/Line in interface Line input: 2 - 2.4 V [p-p], output impedance: 1 KΩ ± 10%

Audio Output	Linear level, impedance: 600 Ω
Communication Interface	1, RJ45 10 /100 Mbps Self-adaptive Ethernet interface. 1, RS-485 interface (half duplex)
Power Output	12 VDC, max 1W
General	
Web Client Language	32 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil)
Power Supply	12 VDC ± 25%, two-core terminal block PoE (802.3at, class 4)
Power Consumption	12 VDC ± 25%: 1.67A to 2.5 A, max. 24W PoE (802.3at, class 4): 42.5 V to 57 V, 0.56 A to 0.42 A, max. 24W
Working Temperature/Humidity	Temperature: -40°F to 149°F (-40°C to 65°C) Humidity: 95% or less
Protection Level	IP67 Standard, IK10 TVS 6000V lightning protection, surge protection, voltage transient protection
Dimensions	13.74" × 4.45" × 4.13" (349.1 × 113 × 105 mm)
Weight	3.77 lb (1.71 kg)
Detection Range Table	
VCA Range for Humans	120 m
VCA Range for Vehicles	300 m
Approval	
EMC	CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN50130-4: 2011+A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 7)
Safety	CB: IEC 62368-1: 2014+A11; CE-LVD: EN 62368-1: 2014/A11: 2017; BIS: IS 13252 (Part 1): 2010/ IEC 60950-1: 2005 LOA: SANS/IEC 60950-1
Environment	CE-RoHS：2011/65/EU, WEEE: 2012/19/EU, Reach：Regulation(EC) No 1907/2006
Protection	IP67: IEC 60529-2013 IK10: IEC 62262-2002

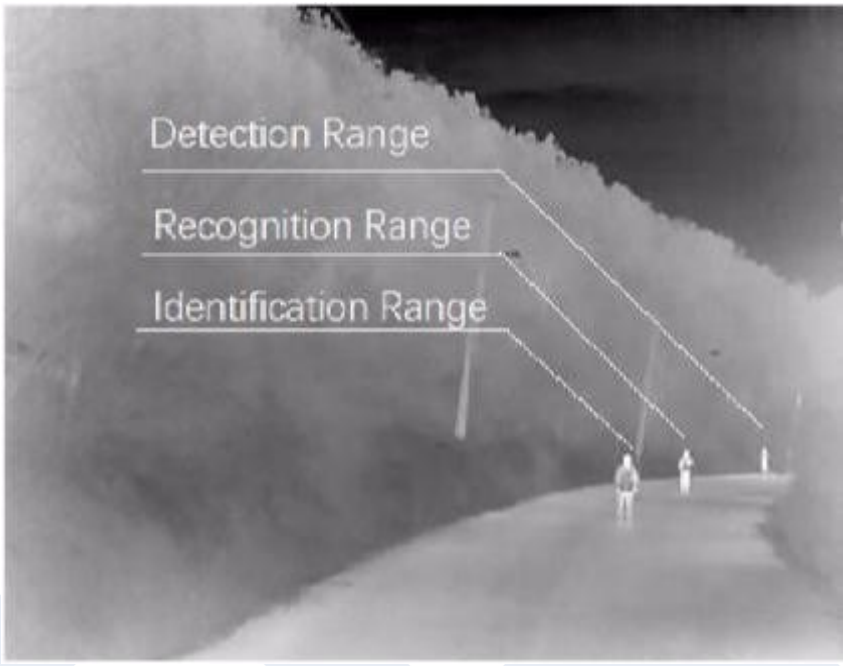
▪ Range Table

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

VCA Range (Humans: 1.8 × 0.5 m)	VCA Range (Vehicles: 1.4 × 4.0 m)	Temperature Measurement (Object: 1 × 1 m)	Temperature Measurement (Object: 0.2 × 0.2 m)	Fire Detection (Object：0.5 × 0.5m)	Smoking Detection
120 m	291m	161.7m	32.3m	74.4m	14.55m

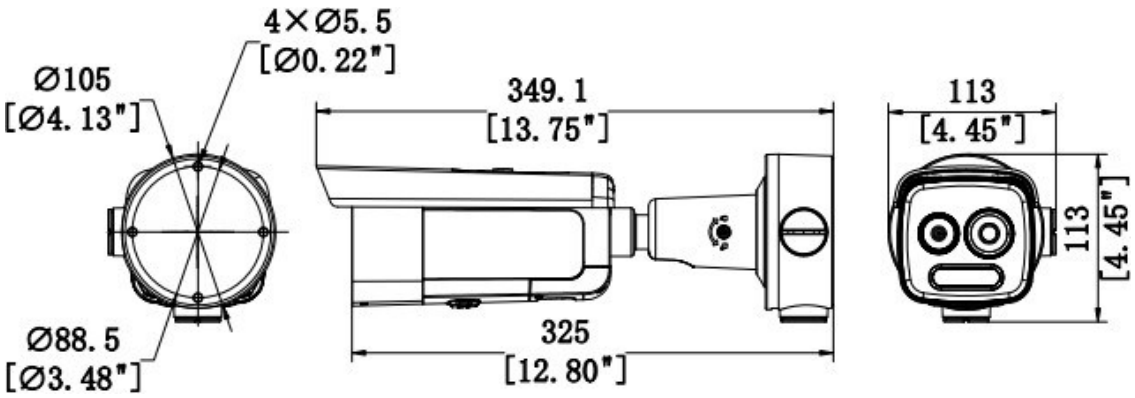
▪ DORI

**The table is only for reference, and the performance may vary according to different environments.*
**The optimal human detection, recognition, and identification distances are calculated according to Johnson's Criteria.*
Detection Range: To distinguish an object from the background, the object must be covered by 1.5 or more pixels.
Recognition Range: To classify the object (animal, human, vehicle, etc.), the object must be covered by 6 or more pixels.
Identification Range: To identify the object and describe it in detail, the object must be covered by 12 or more pixels.



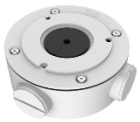
Detection Range (Humans: 1.8 × 0.5 m)	Detection Range (Vehicles: 1.4 × 4.0 m)	Recognition Range (Humans: 1.8 × 0.5 m)	Recognition Range (Vehicles: 1.4 × 4.0 m)	Identification Range (Humans: 1.8 × 0.5 m)	Identification Range (Vehicles: 1.4 × 4.0 m)
404m	1239m	101m	310m	50m	155m

▪ Dimension



▪ Accessory

▪ Included

LTB801


▪ Optional

LTB378	LTB379
	

▪ Note

COMPLIANCE NOTICE: The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different countries.