

IPC-TO56C-A3

Deep learning Thermal/Optical Bi-spectrum Network Bullet Camera with strobe light and audio alarm



This is a deep learning thermal + optical Bi-spectrum network bullet camera with temperature and fire detection, perfect for perimeter detection. It also comes with strobe light and audio alarm.

This thermal Bi-spectrum network camera is perfect to be used in small farm, car dealership, factory, museum entrance and small enterprise where need fire detection and perimeter detection.

Outstanding Features

- Powered by deep learning technology
- Support thermal + optical Bi-spectrum
- Built-in temperature and fire detection function
- Come with strobe light and audio alarm
- Thermal view: VOx UFPA 160×120 pixels, 3mm lens
- Optical view: 4MP Resolution (2688×1520), 132ft IR, 4mm lens
- Support Bi-spectrum Image Fusion, picture-in-picture, VCA analysis

Optional Accessory

DS-1275ZJ-S-SUS Vertical Pole Mount	DS-1276ZJ-SUS Corner Mount
	

Specification

Thermal Module	
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	160 × 120 (the resolution of output image is 320 × 240)
Pixel Interval	17μm
Response Waveband	8 μm to 14 μm
NETD (Noise Equivalent Temperature Difference)	≤ 40 mk (25 °C, F# = 1.1)
Focal Length	3.1 mm
IFOV	5.48 mrad
Field of View	50° × 37.2° (H × V)
Min. Focusing Distance	0.2 m
Aperture	F 1.1
Digital Zoom	×2, ×4, ×8
Optical Module	
Image Sensor	1/2.7" Progressive Scan CMOS
Resolution	2688 × 1520
Min. Illumination	Color: 0.0089 Lux @(F1.6, AGC ON), B/W: 0.0018 Lux @(F1.6, AGC ON)
Shutter Speed	1 s to 1/100,000 s
Focal Length	4 mm
Field of View	84° × 44.8° (H × V)
Aperture	F1.6
WDR	120 dB
Image Effect	
Picture in Picture	Display partial image of thermal channel on the full screen of optical channel
Bi-spectrum Image Fusion	Display the details of optical channel on thermal channel
Target Coloration	Yes. Supported in white hot and black hot mode.
Smart Function	
VCA (Video Content Analysis)	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, 21 rules in total (10 points, 10 areas, 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 detection, up to 10 fire points detectable.
Illuminator	
IR Distance	Up to 40 m
IR Intensity and Angle	Automatically adjusted
Audible and Visual Alarm	
White Light Range	Up to 40 m
Visual Alarm	Yes. White light used as the visual alarm, flashing frequency adjustable
Audio alarm	Yes. 6 audio alarms are supported to cover all kinds of alarm.
Video & Audio	
Main Stream	Optical channel 50 HZ: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720) 60 HZ: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720) Thermal channel 25fps (1280 × 720, 704 × 576, 640 × 480, 352 × 288, 320 × 240)
Sub-stream	Optical channel 50 HZ: 25fps (704 × 576, 352 × 288, 176 × 144) 60 HZ: 30fps (704 × 480, 352 × 240, 176 × 120) Thermal channel 25fps (704 × 576, 352 × 288, 320 × 240)
Video Compression	Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG
Audio Compression	G.711u/G.711a/G.722.1/MP2L2/G.726/PCM
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
Network Storage	MicroSD/SDHC/SDXC card (up to 256 G) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
API	Open-ended API, supporting ISAPI, HIKVISION SDK, and third-party management platform, open network video interface
Simultaneous Live View	Up to 20 channels
User/Host Level	Up to 32 users, 3 levels: Administrator, Operator, User
Security	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering
Client	Guarding Vision
Web Browser	IE 11, Chrome 41-44, Firefox 30-51

Specification

Interface	
Alarm Input	2-ch inputs (0-5 VDC)
Alarm Output	2-ch relay outputs, alarm response actions configurable
Alarm Action	SD record/relay output/smart capture/FTP upload/email linkage/audio alarm/white light alarm
Audio Input	1, 3.5 mm Mic in/Line in interface Line input: 2 to 2.4 V [p-p], output impedance: 1 K Ω \pm 10%
Audio Output	Linear level, impedance: 600 Ω
Communication Interface	1, RJ45 10 M/100 M self-adaptive Ethernet interface 1, RS-485 interface
General	
Menu 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	12 VDC \pm 20%, two-core terminal block PoE (802.3af, class 3)
Power Consumption	12 VDC \pm 20%: 0.65 A, max. 7.5 W PoE (802.3af, class 3): 42.5 V to 57 V, 0.14 A to 0.22 A, max. 8 W
Working Temperature/Humidity	Temperature: -40 $^{\circ}$ C to 65 $^{\circ}$ C (-40 $^{\circ}$ F to 149 $^{\circ}$ F) Humidity: 95% or less
Protection Level	IP66 Standard TVS 6000V lightning protection, surge protection, voltage transient protection
Dimensions	358.3 mm \times 113.5 mm \times 115.2 mm (14.10" \times 4.47" \times 4.53")
Weight	Approx. 1.76 kg (3.88 lb)

DRI Range Table

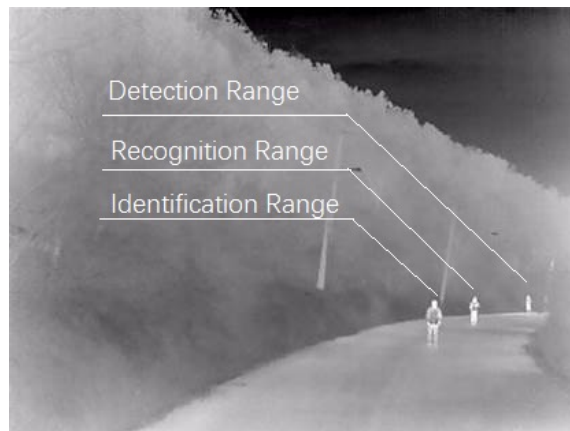
* The table is only for reference and the performance may vary according to different environment.

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

Detection Range: In order to distinguish an object from the background, the object must be covered by 1.5 or more pixels.

Recognition Range: In order to classify the object (animal, human, vehicle, etc.), the object must be covered by 6 or more pixels.

Identification Range: In order to identify the object and describe it in details, the object must be covered by 12 or more pixels.



Detection Range (Vehicles: 1.4 \times 4.0 m)	Detection Range (Humans: 1.8 \times 0.5 m)	Recognition Range (Vehicles: 1.4 \times 4.0 m)	Recognition Range (Humans: 1.8 \times 0.5 m)	Identification Range (Vehicles: 1.4 \times 4.0 m)	Identification Range (Humans: 1.8 \times 0.5 m)
280 m	91 m	70 m	23 m	35 m	11 m

Smart Function Table

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

VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	Temperature Measurement (Object: 2 × 2 m)	Temperature Measurement (Object: 1 × 1 m)	Fire Detection (Object: 2 × 2 m)	Fire Detection (Object: 1 × 1 m)
43 m	15 m	66 m	33 m	180 m	90 m

Dimension

