



IK-B4731V-F

Thermal Imaging Security Bullet Network Camera

Key Features

- 384 × 288 resolution, 17 μm, VOx UFPA, NETD ≤ 40 mK
- 9/15/25/35/50mm fixed thermal lens
- Supports human and vehicle detection
- Supports smoking detection, and fire spot detection
- Intelligent Analytics: intrusion, single line crossing, double line crossing, loitering, wrong-way, people counting, enter area, leave area
- Supports 3 temperature measurement rule types (spot, line, area)
- Temperature measurement range: -20°C to 150°C (-4°F to 302°F), accuracy: ±8°C
- Supports 12 VDC / 24 VAC / PoE power supply
- NDAA compliant; IP66-rated protection

Specification

| Thermal Module | |
|-----------------------|--|
| Image Sensor | Vanadium Oxide Uncooled Focal Plane Arrays |
| Resolution | Sensor is 384×288. Image can be scaled up to 1280×720 |
| Pixel Pitch | 17 μm |
| NETD | ≤ 40mK |
| Spectral Range | 8 to 14 μm |
| Focus Control | Focus-Free |
| Focal Length | 9 mm, 15 mm, 25 mm, 35 mm, 50 mm |
| Aperture | F1.0 |
| Field of View (FOV) | 9 mm, H: 37°, V: 28° 15 mm, H: 28°, V: 21° 25 mm, H: 14°, V: 11° 35 mm, H: 10°, V: 8° 50 mm, H: 7.4°, V: 5.6° |
| Intelligent Analytics | |
| Smart Detection | Human and Vehicle detection, Fire point detection, and Smoker detection. |
| Intelligent Analysis | Intrusion, Single line crossing, Double line crossing, Loitering, Wrong-way, Enter area, and Leave area (these functions support accurate detection of human / vehicles) |
| People counting | Supported |
| Thermal Function | |
| Temperature Range | -20°C to 150°C (-4°F to 302°F) |
| Accuracy | ±8°C |
| Temperature Detection | 3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line). |
| Temperature Alarm | Temperature difference alarm, Threshold alarm, Temperature rise alarm |
| Temperature Display | Display in the lower left corner; follow the cursor display of the highest temperature, lowest temperature or average temperature |
| Response Time | ≤ 30ms |
| Video and Audio | |
| Main Stream | 1280×720, 704×576, 384×288 @25fps |
| Sub Stream | 704×576, 384×288, 352×240 @25fps |
| Bit Rate Control | CBR/VBR |
| Bit Rate | Main stream: 100 Kbps to 8 Mbps, Sub stream: 100 Kbps to 6 Mbps |
| Region of Interest | Off/On (8 Zone, Rectangle) |
| Audio Compression | G.711 A-law, G.711 μ-law, RAW_PCM |

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|------------------------|--|
| Audio Bit Rate | 64 Kbps (G.711), 128 Kbps (RAW_PCM) |
| Image | |
| Image Setting | Brightness, Contrast, Sharpness |
| Mirror | 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 |
| Noise Reduction | 2D/3D DNR |
| OSD | Up to 8 OSD |
| Privacy Masking | Up to 4 areas |
| Event | |
| Alarm Triggers | IVS, Temperature anomaly, Motion detection, Alarm Input, Disk alarm, Network alarm, Abnormal sound detection |
| Event Actions | Alarm record, Alarm output, FTP upload, SMTP upload, Audible alarm output |
| Network | |
| Protocols | IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPoE, RTSP/ RTCP/RTP, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, ICMP, IGMP, SMTP, 802.1x, SNMP, Multicast |
| Interoperability | ONVIF (Profile S/T/G/M), SDK, CGI |
| Max Concurrent Streams | 10 channels |
| User/Host Level | 32+ users, 3 levels: Administrator, Operator, Media user |
| Security | IP address filter, 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 Audio In, 1ch Audio Out |
| Alarm Interface | 2ch Alarm In, 2ch Alarm Out |
| BNC Interface | 1ch (CVBS output) |
| Control Interface | 1ch RS-485 |
| SD Card Slot | Built-in, up to 512GB |
| Reset Button | Supported |
| General | |
| Language | English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English |
| Power Supply | 12 VDC / 24 VAC / PoE (802.3af) |
| Power Consumption | Max 4.5W |

| | |
|-----------------------|---|
| Operating Temperature | -40°C to 60°C (-40°F to 140°F) |
| Operating Humidity | < 90% RH (non-condensing) |
| Certifications | CE-EMC: EN 55032, EN IEC 61000-6-4, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4 FCC: 47 CFR Part 15 Subpart B |
| Ingress Protection | IP66 |
| Material | Metal |
| Dimensions | φ120.5 × 315.9 ~ 352.6 mm (φ4.74" × 12.44" ~ 13.88") |
| Net Weight | 1.62 kg (3.57 lb) with 9mm lens |

DRI Distance Table

| Focal Length | 9 mm | 15 mm | 25 mm | 35 mm | 50 mm |
|--|------------------|--------------------|----------------------|-----------------------|-----------------------|
| Detection Distance (Humans: 1.8×0.5m) | 265 m (869.4 ft) | 441 m (1,446.9 ft) | 735 m (2,411.4 ft) | 1,029 m (3,376.0 ft) | 1,471 m (4,826.1 ft) |
| Detection Distance (Vehicles: 4×1.5m) | 812 m (2,664 ft) | 1,353 m (4,439 ft) | 2,255 m (7,398.3 ft) | 3,157 m (10,357.6 ft) | 4,510 m (14,796.6 ft) |
| Recognition Distance (Humans: 1.8×0.5m) | 66 m (216.5 ft) | 110 m (360.9 ft) | 184 m (603.7 ft) | 257 m (843.2 ft) | 368 m (1,207.4 ft) |
| Recognition Distance (Vehicles: 4×1.5m) | 203 m (666 ft) | 338 m (1,109 ft) | 564 m (1,850.4 ft) | 789 m (2,588.6 ft) | 1,127 m (3,697.5 ft) |
| Identification Distance (Humans: 1.8×0.5m) | 33 m (108.3 ft) | 55 m (180.4 ft) | 92 m (301.8 ft) | 129 m (423.2 ft) | 184 m (603.7 ft) |
| Identification Range (Vehicles: 4×1.5m) | 101 m (331.4 ft) | 169 m (554.5 ft) | 282 m (925.2 ft) | 395 m (1,296 ft) | 564 m (1,850.4 ft) |

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.
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.

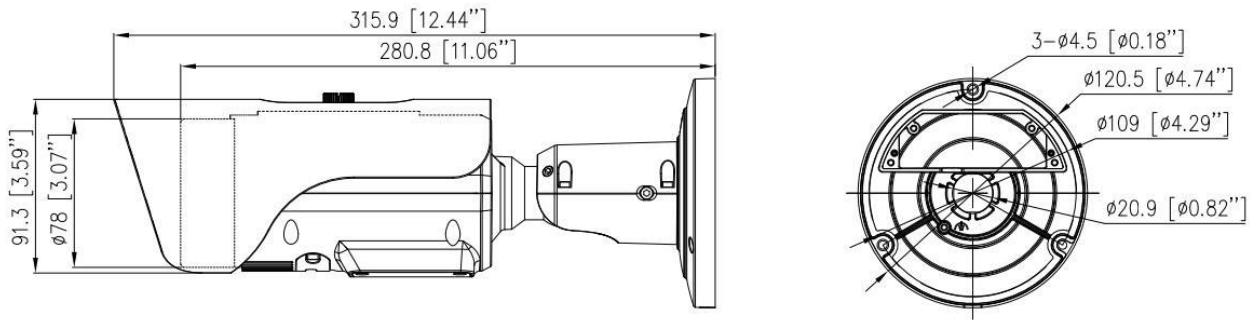
Smart Detection Range Table

| Focal Length | 9 mm | 15 mm | 25 mm | 35 mm | 50 mm |
|---|------------------|--------------------|--------------------|--------------------|----------------------|
| VCA Detection Distance (Human: 1.8 × 0.5 m) | 50 m (164.0 ft) | 86 m (281.2 ft) | 243 m (797.2 ft) | 350 m (1,148.3 ft) | 500 m (1,640.4 ft) |
| VCA Detection Distance (Front/Rear of Vehicle: 4×1.5 m) | 100 m (328.1 ft) | 180 m (590.6 ft) | 300 m (984.3 ft) | 400 m (1,312.3 ft) | 630 m (2,066.9 ft) |
| Temperature Measurement (Object: 1 × 1m) | 106 m (347.8 ft) | 176 m (577.4 ft) | 294 m (964.6 ft) | 412 m (1,351.7 ft) | 588 m (1,929.1 ft) |
| Temperature Measurement (Object: 0.2 × 0.2m) | 21 m (68.9 ft) | 35 m (114.8 ft) | 59 m (193.6 ft) | 82 m (269 ft) | 118 m (616.8 ft) |
| Fire Detection (Object: 1 × 1m) | 265 m (869.4 ft) | 441 m (1,446.9 ft) | 735 m (2,411.4 ft) | 1,029 m (3,376 ft) | 1,471 m (4,826.1 ft) |
| Fire Detection (Object: 0.2 × 0.2m) | 53 m (173.9 ft) | 88 m (288.7 ft) | 147 m (482.3 ft) | 206 m (675.9 ft) | 294 m (964.6 ft) |

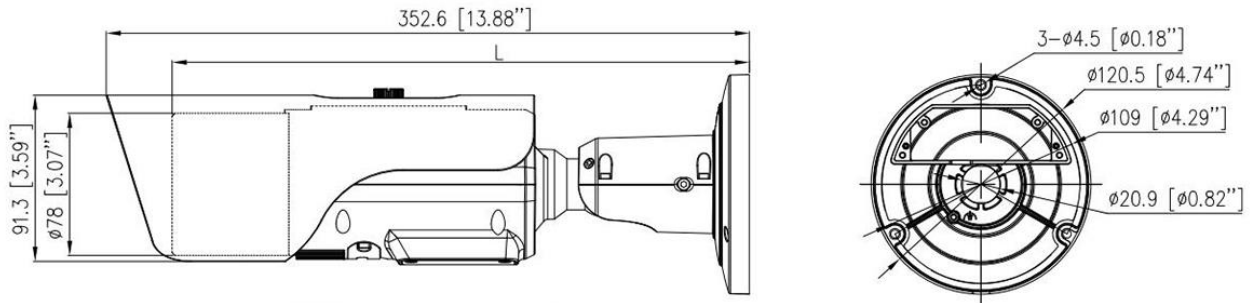
Note: The table is for reference only. The distances within it are subject to actual conditions including atmospheric conditions, target size, the installation site, and more.

Dimensions (mm)

F9/F15 mm Lens



F25/F35/F50 mm Lens



Accessories

Optional:

| IK-AJ45G Junction Box | IK-AP01A Pole Mount | IK-ACR02A Corner Mount |
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