

IK-B6733T-F

Bi-spectrum Vehicle-Mounted Network Camera



Key Features

- Bi-Spectrum: 640 × 512 thermal and 4 MP visible sensors
- 12 μm VOx uncooled thermal sensor, NETD < 20 mK
- 7mm fixed thermal lens; 2.8mm visible lens
- Supports human and vehicle detection, smoking, smoke and flame detection, and fire spot detection.
- Intelligent analytics: intrusion, smart motion detection, single/double line crossing, loitering, wrong-way, enter/leave area detection, and people counting
- Support 3 temperature measurement rule types (spot, line, area)
- Temperature monitoring & alarm: -20 °C to 150 °C; accuracy: ±2 °C / ±2%.
- Built-in microphone and 1ch audio output
- Support 12VDC/PoE power supply
- IP66

Specifications

Camera		
	Thermal	Visible
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays	1/1.8" CMOS
Max Resolution	Sensor is 640×512, Image can be scaled up to 1920×1080	4MP, 2688 (H)×1520 (V)
Pixel Pitch	12 μm	N/A
Spectral Range	8 to 14 μm	N/A
NETD	≤ 20mK	N/A
Shutter Speed	N/A	1/5 to 1/20,000s
Min Illumination	N/A	Color: 0.005 Lux @(F1.6, AGC ON), B/W: 0.001 Lux @(F1.6, AGC ON)
Day & Night	N/A	Auto (ICR)
Lens		
	Thermal	Visible
Lens Type	Fixed lens	Fixed lens
Focal Length	7 mm	2.8 mm
Max. Aperture	F1.0	F1.6
Field of View (FOV)	H: 63°, V: 50°	H: 112°, V: 58°
Focus Control	Free-focus	Fixed focus
Intelligent Analytics		
	Thermal	Visible
AI Multi-Target	Supports human/vehicle detection.	Supports human/vehicle detection.
Intelligent Analysis	Intrusion, smart motion detection, single/double line crossing, loitering, wrong-way detection, and enter/leave area. - Supports accurate target classification (human/vehicle)	Intrusion, smart motion detection, single/double line crossing, loitering, wrong-way detection, and enter/leave area. - Supports accurate target classification (human/vehicle)
Smoke and Flame Detection	N/A	Supported
People Counting	Supported	Supported
Smoking Detection	Supported	N/A
Fire Spot Detection	Supported	N/A
Video & Audio		
	Thermal	Visible
Main Stream	1920×1080, 1280×1024, 1280×720, 640×512	2688×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720

Sub Stream	D1, VGA, 640×512, CIF	D1, VGA
Frame Rate	Up to 25fps	Up to 25/30fps
Bit Rate Control	CBR/VBR	CBR/VBR
Bit Rate	Main stream: 100 Kbps to 12 Mbps, Sub stream: 100 Kbps to 6 Mbps	Main Stream: 100 Kbps to 16 Mbps Sub Stream: 100 Kbps to 6 Mbps
Smart Encoding	Supported	Supported
Audio Compression	G.711 A-law, G.711 μ -law, RAW_PCM	G.711 A-law, G.711 μ -law, RAW_PCM
Audio Bit Rate	64 Kbps (G.711), 128 Kbps (RAW_PCM)	64 Kbps (G.711), 128 Kbps (RAW_PCM)

Image

	Thermal	Visible
Image Adjustment	Brightness, Contrast, Sharpness	Brightness, Saturation, Contrast, Sharpness
Scene Mode	Mirror	Indoor, Outdoor, Mirror
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)	N/A
FFC Control	Auto / Manual	N/A
Exposure Mode	N/A	Auto / Manual
White Balance	N/A	Auto / Tungsten / Fluorescent / Daylight / Shadow / Manual
Day/Night Setting	N/A	Auto / Day / Night / Timer
Noise Reduction	2D/3D DNR	2D/3D DNR
Image Enhancement	N/A	HLC, BLC, Defog, WDR
Wide Dynamic Range	N/A	True WDR 120dB
OSD	Up to 8 OSD	Up to 8 OSD
Privacy Masking	Up to 4 areas	Up to 4 areas

Thermal Function

Temperature Range	-20°C to 150°C (-4°F to 302°F)
Accuracy	$\pm 2^{\circ}\text{C}$ / $\pm 2\%$
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	$\leq 30\text{ms}$
Image Fusion	Fusion view of thermal view and overlaid details of the optical channel

Event

Alarm Triggers	IVS, Temperature anomaly, Motion detection, Disk alarm, Network alarm, Abnormal sound detection
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Event Actions	Alarm record, SMTP, FTP 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
Application Programming Interface	ONVIF (Profile S/T/G/M), SDK, CGI
Max Concurrent Streams	10 channels
User/Host Level	32+ users, 3 levels: Administrator, Operator, Media user
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge
Security	
OS / Firmware Protect	Encrypted firmware, Signed firmware
User Authentication	Digest authentication, Prevent brute-force attack
Network Authentication	IEEE 802.1X (EAP-TLS)
Secure Communication	HTTPS, WSS (WebSocket Secure), SRTP
Access Control	IP-based access control, Auto logout
Data Protect	Encryption credentials
Audit	Access / System / Event Log management
Supply Chain Security	SBOM
Interface	
Network Interface	RJ-45 Ethernet (10/100BASE-T)
Built-in Microphone	Supported
Audio Interface	1 output
CVBS Output	Supported
General	
Language	English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English
Power Supply	12 VDC / PoE (802.3af)
Power Consumption	Max 6 W
Operating Temperature	-40°C to 60°C (-40°F to 140°F)
Operating Humidity	Less than 95% RH (no condensation)
Ingress Protection	IP66
Certifications	CE / FCC
Material	Aluminum alloy
Dimensions	150.6 × 129.4 × 135 mm (5.93 × 5.1 × 5.31 inch)
Net Weight	Approx. 1.77 Kg (3.9 lb)
Thermal DRI Distance	
Thermal Lens	7 mm

Detection (Human: 1.8×0.5 m)	292 m (958.0 ft)
Detection (Vehicle: 4×1.5 m)	894 m (2933.1 ft)
Recognition (Human: 1.8×0.5 m)	73 m (239.5 ft)
Recognition (Vehicle: 4×1.5 m)	224 m (734.9 ft)
Identification (Human: 1.8×0.5 m)	36 m (118.1 ft)
Identification (Vehicle: 4×1.5 m)	112 m (367.5 ft)

Note:

Distances are calculated based on Johnson's Criteria.

Detection: Object must be covered by ≥ 1.5 pixels.

Recognition: Object must be covered by ≥ 6 pixels.

Identification: Object must be covered by ≥ 12 pixels.

Thermal Smart Detection

Lens	7 mm
Temperature Measurement (1×1 m)	117 m (383.9 ft)
Temperature Measurement (0.2×0.2 m)	23 m (75.5 ft)
Fire Detection (1×1 m)	292 m (958 ft)
Fire Detection (0.2×0.2 m)	58 m (190.3 ft)

Note:

Values are for reference only. Actual detection range may vary with atmospheric conditions, target size, and installation environment.

Dimensions (mm)

