INTELLIO

ILO-511-BL-09 - 50

Thermal camera



NEO Thermal

Made in Japan / NDAA certified

Camera & Sensor					
Max Resolution	Sensor is 384×288. Image can be scaled up to 1280×720				
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays				
Pixel Pitch	17 μm				
Spectral Range	8 to 14 μm				
NETD	≤ 40mK				
Lens					
Lens Type	Fixed lens				
Focal Length	9 mm, 15 mm, 25 mm, 35 mm, 50 mm optional				
Max. Aperture	F1.0				
Field of View (FOV)	9 mm, H: 37.1°, V: 27.9° 15 mm, H: 28.1°, V: 20.9° 25 mm, H: 14.1°, V: 10.9° 35 mm, H: 10.1°, V: 7.9° 50 mm, H: 7.1°, V: 5.4°				
Focus Control	Focus-free				
Thermal DRI Distance					
Thermal Lens	9 mm	15 mm	25 mm	35 mm	50 mm
Detection (Human: 1.8×0.5 m)	264 m (861.1 ft)	440 m (1,443.6 ft)	734 m (2,408.1 ft)	1,028 m (3,372.7 ft)	1,470 m (4,822.8 ft)
Detection (Vehicle: 4×1.5 m)	811.9 m (2,663.7 ft)	1,352 m (4,435.7 ft)	2,254 m (7,395.0 ft)	3,156.8 m (10,357.0 ft)	4,509.9 m (14,796.3 ft)
Recognition (Human: 1.8×0.5 m)	65.9 m (216.2 ft)	109.9 m (360.6 ft)	183.9 m (603.3 ft)	256.9 m (842.8 ft)	367.9 m (1,207.0 ft)
Recognition (Vehicle: 4×1.5 m)	202.9 m (665.7 ft)	337.9 m (1,108.6 ft)	563.9 m (1,850.1 ft)	788 m (2,585.3 ft)	1,126 m (3,694.2 ft)
Identification (Human: 1.8×0.5 m)	32.9 m (107.9 ft)	54.9 m (180.1 ft)	91.9 m (301.5 ft)	128.9 m (422.9 ft)	183.9 m (603.3 ft)
Identification (Vehicle: 4×1.5 m)	100.9 m (331 ft)	168.9 m (554.1 ft)	281.9 m (924.9 ft)	394.9 m (1,295.6 ft)	563.9 m (1,850.1 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 Function					
Temperature Range	-20°C to 150°C (-4°F to 302°F)				
Accuracy	±8°C				
Temperature Detection	Supports 3 rule types (spot, line, area); up to 20 rules in total, including 1				
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				
Response Time	≤ 30ms				

Thermal Smart Detection					
Lens	9 mm	15 mm	25 mm	35 mm	50 mm
VCA Detection (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 (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 (1 ×1 m)	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 (0.2×0.2 m)	21 m (68.9 ft)	35 m (114.8 ft)	59 m (193.6 ft)	82 m (269.0 ft)	118 m (387.1 ft)
Fire Detection (1×1 m)	265 m (869.4 ft)	441 m (1,446.9 ft)	735 m (2,411.2 ft)	1,029 m (3,376.0 ft)	1,471 m (4,826.1 ft)
Fire Detection (0.2×0.2 m)	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:					
Values are for reference only. Actual detection range may vary with atmospheric conditions, target size, and					

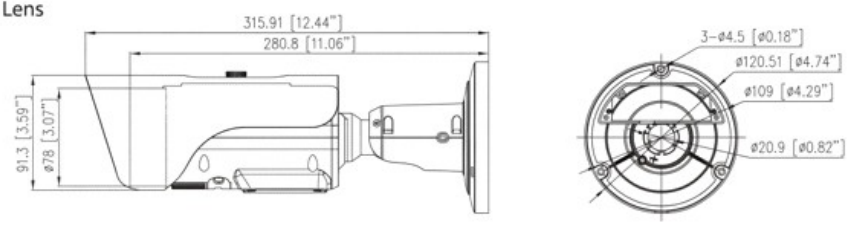
Image Settings	
Image Adjustment	Brightness, Contrast, Sharpness
Scene Mode	Mirror
Pseudo-color Setting	Up to 17 colors (White-hot / Black-hot / Rainbow / Iron red / HSV /Bone /
FFC Control	Auto / Manual
Noise Reduction	2D/3D DNR
OSD	Up to 8 OSD
Privacy Masking	4 areas
Video & Audio Streams	
Main Stream	1280×720, D1, 384×288
Sub Stream	D1, 384×288, CIF
Frame Rate	Up to 25fps
Bit Rate Control	CBR/VBR
Bit Rate	Main stream: 100 Kbps to 8 Mbps, Sub stream: 100 Kbps to 6 Mbps
Smart Encoding	Supported
Audio Compression	G.711 A-law, G.711 μ-law, RAW_PCM
Audio Bit Rate	64 Kbps (G.711), 128 Kbps (RAW_PCM)
Events & Alarms	
Alarm Triggers	IVS, Motion detection, Alarm input, Network alarm, Disk alarm, Abnormal sound detection
Event Actions	Alarm record, Alarm output, FTP upload, SMTP upload, Audible alarm output

Intelligent Analytics	
Smart Tracking	Supports fullbody and vehicle detection
Smart Detectors	Intrusion, smart motion detection, single-line crossing, double-line crossing, loitering, wrong-way detection, enter area, leave area; supports alarm triggering based on specified target types (human/vehicle)
Statisctical Detectors	People Counting
Thermal Detectors	Smoking and Fire Spot Detection
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
Network	
Protocols	IPv4/IPv6, TCP/UDP, DNS, DHCP, HTTP/HTTPS, DDNS, PPPoE, RTSP/ RTCP/RTP, NTP, ARP, UPnP, FTP, SMTP, QoS, ICMP, IGMP, SMTP, 802.1x, SNMP. Multicast
Application Programming Interface	ONVIF (Profile G/S/T/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
Interfaces	
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
RS-485	1ch
CVBS Output	Supported
SD Card Slot	Built-in, up to 512 GB
Reset Button	Supported

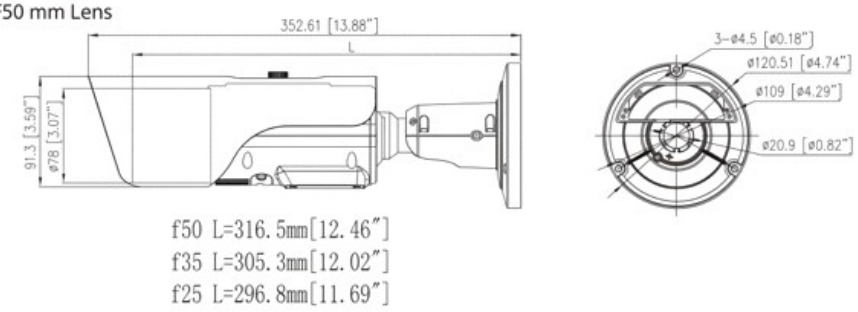
General Specifications	
Language	English (default), Hungarian, Japanese, Polish, Italian, Portuguese, Spanish, Russian, Chinese, Traditional Chinese, Korean, French, Czech
Power Supply	12 VDC / 24 VAC / PoE (802.3af)
Power Consumption	Max 4.5 W
Operating Temperature	-40°C to 60°C (-40°F to 140°F)
Operating Humidity	≤95% RH (non-condensing)
Ingress Protection	IP66, IK10-rated housing,
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
Material	Metal
Dimensions	φ120.51 × 315.91 ~ 352.61 mm (φ4.74" × 12.44" ~ 13.88")
Net Weight	1.62 kg (3.57 lb) with 9mm lens
Accessories (optional)	
Junction box	 ILA-106
Vertical pole mounting	 ILA-304

Dimensions (mm)

F9 / F15 mm Lens



F25 / F35 / F50 mm Lens



f50 L=316.5mm[12.46"]
f35 L=305.3mm[12.02"]
f25 L=296.8mm[11.69"]