INTELLIO

ILO-421-FE-FI

Fisheye camera, 12MP



NEO Multi

Made in Japan / NDAA certified

Camera & Sensor	
Max Resolution	12MP, 4000(H) × 3000(V)
Min Illumination	Color: 0.01 Lux @ (F2.4, AGC ON), B/W: 0.005 Lux @ (F2.4, AGC ON), 0 Lux with IR on
Image Sensor	1/1.7” Progressive Scan CMOS
Shutter Speed	1/5 to 1/50,000s
Day & Night	Auto (ICR)
Illuminator	
Type	IR
IR wavelength	850 nm
Distance	Up to 15 m (49.2 ft)
Control	Auto/ Manual
Lens	
Lens Type	Fixed-focal lens
Focal Length	1.8 mm
Max. Aperture	F2.4
Field of View (FOV)	180° × 180°
Iris	Fixed Iris
Fisheye Display	
Mount Type	Ceiling Mount, Wall Mount, Desktop Mount
Decoding Mode	On-board Dewarping/Client-side Dewarping
Display Mode	12 display modes in total Client-side Dewarping: - 180° panorama view, 360° panorama view, 360° panorama + PTZ, 360° panorama + 3PTZ, 360° panorama + 6PTZ, 360° panorama + 8PTZ, Fisheye view, Fisheye + 3PTZ, Fisheye + 8PTZ, 4PTZ, 2PTZ, Fisheye + 1PTZ + 360° On-board Dewarping: - Fisheye view, Double panorama view, 4PTZ, Single panorama view, Fisheye + 3PTZ

DORI Distance	
Detect	34.4 m (112.9 ft)
Observe	13.7 m (44.95 ft)
Recognize	6.8 m (22.31 ft)
Identify	3.3 m (10.83 ft)
Image Settings	
Image Adjustment	Brightness, Sharpness, Contrast, Saturation
Scene Mode	Indoor, Outdoor
Exposure Mode	Auto, Manual, Shutter priority
White Balance	Auto, Tungsten, Fluorescent, Daylight, Shadow, Manual
Day/Night Setting	Auto, Day mode, Night mode, Timer
Noise Reduction	2D/3D DNR
Image Enhancement	WDR, HLC, BLC, Defog
Wide Dynamic Range	DWDR
Privacy Masking	Support (Single-channel and fisheye mode)
Video & Audio Streams	
Number of Streams	2 Streams
Resolution	Stream1: One-Channel: - Fisheye View: 4000×3000, 3000×3000, 2560×2560, 1280×960 - 180° Panorama View: 3000×752, 2560×640, 1920×480, 1280×960 - 360° Panorama View: 4000×2000, 2560×1280, 1920×960, 1280×960 - 4PTZ View: 4000×3000, 2048×1536, 1920×1440, 1280×960 - Fisheye + 3PTZ View: 4000×3000, 2048×1536, 1920×1440, 1280×960 Multi-Channel: 1520×1520, 1280×960, 960×960, 720×720, 640×640 Stream2: One-Channel: - Fisheye View: D1, 640×640, 480×480 - 180° Panorama View: 832×208, D1 - 360° Panorama View: 640×640, D1 - 4PTZ View: D1, VGA, QVGA - Fisheye + 3PTZ View: D1, VGA, QVGA Multi-Channel: 640×640, D1
Frame Rate	Up to 25fps
Bit Rate Control	CBR/VBR
Bit Rate	One-Channel: - Stream1: 200 Kbps to 16 Mbps - Stream2: 100 Kbps to 6 Mbps Multi-Channel: - Stream1: 100 Kbps to 12 Mbps - Stream2: 100 Kbps to 6 Mbps
Smart Encoding	Supported
Region of Interest (ROI)	Support (Single-channel and fisheye mode)
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, Day/Night switch alarm, Abnormal sound detection
Event Actions	Alarm record, Alarm output, FTP upload, SMTP upload, Snapshot, Audible alarm output
Intelligent Analytics	
Smart Tracking	Supports face, fullbody, and vehicle detection & capture Supports fullbody and vehicle attribute detection Supports multiple frame modes: Full Frame, Four-Corner Frame, Mosaic
Attribute Extraction	Human Attributes: Gender, age, glasses, hat, bag, upper clothing color & style, lower clothing color & style, reflective vest Vehicle Attributes: Type, color, brand, orientation
Smart Detectors	Intrusion, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection, area people limit, perimeter detection, running detection, fall detection, and fight detection. - Supports alarm triggering based on specified target types (human/vehicle)
Statistical Detectors	People Counting, Heat Map
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
Secure Storage	SDcard partition encrypt (AES-256), Secure element
Supply Chain Security	SBOM
Security Certificate	Secure element (FIPS 140-3 level 3)
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
Built-in Microphone	Supported
Audio Interface	1ch Input, 1ch Output
Alarm Interface	1ch Input, 1ch Output
SD Card Slot	Built-in microSD card slot, up to 1 TB
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 (-15% to +20%) / PoE (802.3af)
Power Consumption	Max 9 W
Operating Temperature	-30°C to 60°C (-22°F to 140°F)
Operating Humidity	Less than 95% RH
Ingress Protection	IP66
Certifications	CE-EMC - EN 55032, EN IEC 61000-6-3, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4 FCC 47 CFR Part 15 Subpart B
Material	Aluminum alloy body, bubble: plastic
Dimensions	Φ130.11 × 38.31 mm (Φ5.12 × 1.51 inch)
Net Weight	Approx. 435 g (0.96 lb)
Accessories (optional)	
Junction box	 ILA-108
Vertical pole mounting bracket	 ILA-302

Dimensions (mm)

