

WV-S4556LMA

5MP Sensor IR In-vehicle 360 Fisheye Network Camera with AI engine

Edge AI 360-degree fisheye camera for video surveillance and business intelligence



- 5MP Outdoor 360-degree fisheye camera
- Up to 3 Edge AI analytic apps
- Built-in IR-LED(14m, 45ft)
- IP66, IK10 certified
- Built-in FIPS 140-2 Level 3 Certified SecureElement (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

SPECIFICATIONS

| Camera | |
|------------------------------|---|
| Image Sensor | Approx. 1/3 type 5MP CMOS image sensor |
| Minimum Illumination | Color : 0.11 lx (30IRE, F2.4, 1/30s, AGC:11)* 0.15 lx (50IRE, F2.4, 1/30s, AGC:11) 0.01 lx (50IRE, F2.4, 16/30s, AGC:11)* BW : 0 lx (50IRE, F2.4, 1/30s, AGC:11, IR LED: On) 0.02 lx (50IRE, F2.4, 1/30s, AGC:11) 0.0013 lx (50IRE, F2.4, 16/30s, AGC:11)* *Converted value |
| Intelligent Auto | On / Off |
| Maximum Shutter | max. 16/30s to Max. 1/10000s |
| Wide Dynamic Range | On / Off, The level can be set in the range of 0 to 31. |
| Dynamic Range | Max.120 dB (Super Dynamic : On, level : 31) |
| Image Settings | Gain (AGC), White balance |
| Image Compensation | Adaptive black stretch, Back light compensation (BLC), Fog compensation, High light compensation (HLC), Digital noise reduction |
| Color/BW (ICR) | Off / On (IR Light Off) / On (IR Light On) / Auto1 (IR Light Off) / Auto2 (IR Light On) / Auto3 (SCC) |
| IR LED Light | High* / Middle / Low / Off *Maximum irradiation distance : 14 m {Approx. 45 ft} (30IRE), 10 m {Approx. 33 ft} (Mounting height : Approx. 3 m, Peripheral intensity control : On) |
| Video Motion Detection (VMD) | On / Off, 4 areas available |
| Scene Change Detection (SCD) | On / Off, 1 areas available |
| Audio Detection | On / Off |
| AI Sound Classification | AI Sound Classification |
| AI Analytics | AI-VMD/AI People Counting for 360-degree fisheye camera, AI Privacy Guard for 360-degree fisheye camera, AI Non mask Detection (prior to V2.70) , Scene Change Detection For details : https://i-pro.com/products_and_solutions/en/surveillance/products/analytics-software 3rd party applications are also available. https://i-pro.com/products_and_solutions/en/surveillance/solutions/edge-ai-platform/application-list |
| Privacy Zone | On / Off, Up to 8 zones available |
| Camera Title (OSD) | On / Off, Up to 20 characters (alphanumeric characters, marks) |
| Fixing angle adjustment | -5°, 0°, +5° |
| Lens | |
| Zoom Ratio | 1x |

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| Digital (Electronic) Zoom | Choose from 3 levels of x1, x2, x4 |
| Focal Length | 0.84 mm {1/32 inches} |
| Maximum Aperture Ratio | 1:2.4 |
| Focus Range | 0.3 m {11-13/16 inches} - ∞ |
| Angular Field of View | Horizontal : 186°, Vertical : 186° |

DORI

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| Distance to the object in the center of the image | Detect (25 ppm / 8 ppf) : 20.7 m / 68.0 ft , Observe (62.5 ppm / 19 ppf) : 8.3 m / 27.2 ft Recognize (125 ppm / 38 ppf) : 4.1m / 13.6ft , Identify (250 ppm / 76 ppf) : 2.1m / 6.8ft |
| Coverage radius when mounted at a height of 3 m (10 ft) | Detect (25 ppm / 8 ppf) : 38.0m / 124.6ft , Observe (62.5 ppm / 19 ppf) : 13.2m / 43.3ft Recognize (125 ppm / 38 ppf) : 4.3 m / 14.1 ft , Identify (250 ppm / 76 ppf) : — |

System on Chip (SoC)

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| System on Chip (SoC) | Ambarella CV22 |
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Browser GUI

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| Camera Control | Brightness, AUX On / Off |
| Audio | Mic (Line) Input : On / Off, Volume adjustment : Low / Middle / High Audio Output : On / Off, Volume adjustment : Low / Middle / High |
| GUI / Setup Menu Language | English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese |

Network

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|-----------------------------|---|
| Network IF | 10Base-T / 100Base-TX, M12 connector |
| Resolution <Ceiling> <Wall> | <ul style="list-style-type: none"> •Fisheye mode (max. 30 fps/25 fps) : 2192×2192 / 1280×1280 / 640×640 / 320×320 •Quad PTZ mode (max. 30 fps/25 fps), Single PTZ mode (max. 30 fps/25 fps) 1600×1200 / 1280×960 / 800×600 / VGA / QVGA |
| Resolution <Ceiling> | <ul style="list-style-type: none"> •Double Panorama mode (max. 30 fps/25 fps) 1920×1080 / 1280×720 / 640×360 / 320×180 •Fisheye + Double Panorama mode (max. 30 fps/25 fps) (Fisheye) 2192×2192 / 1280×1280 / 640×640 / 320×320 (Double Panorama) 1280×720 / 640×360 / 320×180 •Fisheye + Quad PTZ mode (max. 30 fps/25 fps) (Fisheye) 2192×2192 / 1280×1280 / 640×640 / 320×320 (Quad PTZ) 1280×960 / 800×600 / VGA / QVGA •Quad streams mode (Single PTZ (Quad streams)) 1280×960 / 800×600 / VGA / QVGA (max. 30 fps/25 fps) (Quad PTZ) 1600×1200 / 1280×960 / 800×600 / VGA / QVGA (max. 5 fps) |
| Resolution <Wall> | <ul style="list-style-type: none"> •Panorama mode (max. 30 fps/25 fps) : 1920×1080 / 1280×720 / 640×360 / 320×180 •Fisheye + Panorama mode (max. 30 fps/25 fps) (Fisheye) 2192×2192 / 1280×1280 / 640×640 / 320×320 (Panorama) 1280×720 / 640×360 / 320×180 |
| H.265/H.264 | [Transmission Mode] Constant bit rate / VBR / Frame rate / Best effort [Transmission Type] Unicast port (AUTO) / Unicast port (MANUAL) / Multicast |
| JPEG | [Image Quality] 10 steps |
| Smart Coding | GOP (Group of pictures) control : On (Frame rate control) * / On (Advanced) * / On (Mid) / On (Low) / Off *On (Frame rate control) and On (Advanced) are only available with H.265. Auto VIQS : On / Off |
| Audio Compression | G.726 (ADPCM) : 16 kbps / 32 kbps, G.711: 64 kbps, AAC-LC : 64 kbps / 96 kbps / 128 kbps |
| Supported Protocol | IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, SMTP, DNS, NTP, SNMPv1/v2/v3, DHCPv6, RTP, MLD, ICMP, ARP, IEEE 802.1X, DiffServ, FTP, SFTP, MQTT, LLDP IPv4 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP, DHCP, DNS, DDNS, NTP, SNMPv1/v2/v3, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, FTP, SFTP, MQTT, LLDP |

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|-----------------------------------|---|
| Maximum concurrent access number | Up to 14 users (Depends on network conditions) |
| Secure | FIPS 140-2 level 3 (NXP® EdgeLock® SE050F), Device Certificate GlobalSign® pre-installed, HTTPS, User authentication, Digest authentication, Host authentication, IEEE802.1X, System log, Image transmission log, Brute-force protection, Alteration detection, Signed Firmware |
| SDXC/SDHC/SD Memory Card (Option) | H.265 / H.264 recording : Manual REC / Alarm REC (Pre/Post) / Schedule REC JPEG recording : Manual REC / Alarm REC (Pre/Post) Compatible SDXC/SDHC/SD card : 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB*, 64 GB**, 128 GB**, 256 GB**, 512GB**model *SDHC card, ** SDXC card (except miniSD card and microSD card) |
| Mobile Terminal Compatibility | iPad / iPhone, Android™ terminals |
| ONVIF Profile | G / M / S / T |

Alarm

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| Alarm Source | 3 terminals input, VMD, Command alarm |
| Alarm Actions | SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, TCP alarm notification output |

Input/Output

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| Audio Input | ø3.5 mm stereo mini jack, Recommended applicable microphone : Plug-in power type (Sensitivity of microphone : -48 dB ±3 dB (0 dB=1 V / Pa,1 kHz)) Input impedance : Approx. 2 kΩ (unbalanced) Supply voltage : 2.5 V ±0.5 V |
| Audio Output | ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 Ω (unbalanced) Output level : -20 dBV |
| External I/O Terminals | ALARM IN 1 (Black & white input, Auto time adjustment) (x1), ALARM IN 2 (ALARM OUT) (x1), ALARM IN 3 (AUX OUT) (x1) |

General

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|------------------------------------|---|
| Safety | UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1 |
| EMC | FCC (Part15 ClassA), ICES003 ClassA, EN55032 ClassB, EN55035 ECE-R10, EN50498 compliant, EN50121 |
| Power Source and Power Consumption | DC power supply : DC12 V 1.03 A, Approx. 12.4 W PoE (IEEE802.3af compliant, Alternative A) Device : DC48 V 260 mA, Approx. 12.5 W (Class 0 device) |
| Ambient Operating Temperature | IR LED : On -40 °C to +50 °C (-40 °F to 122 °F) / Off -40 °C to +60 °C (-40 °F to 140 °F) |
| Ambient Operating Humidity | 10 to 100 % (no condensation) |
| Anti-Condensation System | Rosahl element |
| Water and Dust Resistance | IP66(IEC60529), Type 4X(UL50), NEMA 4X compliant |
| Shock Resistance | 50J (IEC 60068-2-75 compliant), IK10 (IEC 62262) |
| Wind Resistance | Up to 40 m/s {approx. 89 mph} |
| Railway Application | EN45545 compliant, EN50155-TX |
| Dimensions | When using the attachment plate : ø154 mm × 60.3 mm (H) {ø6-1/16 inches × 2-3/8 inches (H)} , Dome radius 35 mm {1-3/8 inches} |
| Mass (Approx.) | When using the attachment plate : Approx. 870 g {1.92 lbs} |
| Finish | Main body : Aluminum die cast, i-PRO white Outer fixing screws : Stainless steel / Dome section : Polycarbonate resin, Clear |

NOTES

Important

- Safety Precautions : Carefully read the Basic Information, Installation Guide and Operating Instructions before using this product.
- i-PRO Co., Ltd. cannot be held responsible for the performance of the network and/or other manufacturers' products used on the network.
- Masses and dimensions are approximate.
- Specifications are subject to change without notice.

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OPTIONAL ACCESSORIES

Select a compatible accessory

[Accessory Selector \(i-pro.com\)](http://i-pro.com).



WV-Q105A
Mount Bracket



WV-QCL100-W
Mount Bracket



WV-QCL101-W
Mount Bracket



WV-QCL102-W
Universal Camera
Mount Bracket



WV-QCL501-W
Mount Bracket



WV-QCN500-W
Mount Bracket



WV-QJB500-W
Mount Bracket



WV-QLR100-W
Light Rail Mount
Bracket



WV-QPL500-W
Mount Bracket



WV-QSR501-W
Mount Bracket



WV-QWL500-W
Mount Bracket



WV-QWL501-W
Mount Bracket



WV-PM500
Compact microphone
unit for surveillance
cameras

APPEARANCE

