

WV-X15302-Z1LN

2MP AI Outdoor IR Bullet LPR Camera (10x zoom)

2MP AI Outdoor IR Bullet LPR Camera (10x zoom)



- 2MP Bullet camera
- Up to 9 Edge AI analytic apps
- 10x optical zoom
- Built-in IR LED (250m/820ft)
- Embedded LPF (Long Pass Filter)
- Optimized for license plate recognition
- IP66, IP67, IK10 certified
- Built-in FIPS 140-2 Level 3 Certified SecureElement (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

SPECIFICATIONS

| Camera | |
|---|--|
| Image Sensor | Approx. 1/2.8 type CMOS image sensor |
| Scanning Area | 5.57 mm (H) x 3.13 mm (V) {7/32 inches (H) x 1/8 inches (V)} |
| Minimum Illumination | Color : 0.011 lx (30IRE, F1.6, 1/30s, AGC:11)* 0.015 lx (50IRE, F1.6, 1/30s, AGC:11) 0.0001 lx (50IRE, F1.6, 16/30s, AGC:11)* BW : 0 lx (50IRE, F1.6, 1/30s, AGC:11, IR LED: On) *Converted value |
| White Balance | ATW1/ ATW2/ AWC |
| Shutter Speed | [60 fps mode] 1/60 Fix to 1/10000 Fix [30 fps mode] 1/30 Fix to 1/10000 Fix [50 fps mode] 1/50 Fix to 1/10000 Fix [25 fps mode] 1/25 Fix to 1/10000 Fix |
| Maximum Shutter | [60 fps mode] Max. 1/4000 s to Max. 16/30 s [30 fps mode] Max. 1/4000 s to Max. 16/30 s [50 fps mode] Max. 1/4000 s to Max. 16/25 s [25 fps mode] Max. 1/4000 s to Max. 16/25 s |
| Intelligent Auto | On/Off |
| Super Dynamic | On/Off (Range : 0 to 31) |
| Dynamic Range | Max. 144 dB (Super Dynamic: On, Level: 31) |
| Adaptive Black Stretch | The level can be set in the range of 0 to 255. |
| Back Light Compensation/High Light Compensation | BLC (Back light compensation) / HLC (High light compensation) / Off (Range : 0 to 31) *only when Super Dynamic/ Intelligent Auto: Off |
| Fog Compensation | On/Off (Range : 0 to 8) *only when Intelligent Auto / Auto contrast adjust: Off |
| Maximum Gain (AGC) | The level can be set in the range of 0 to 11. |
| Color/BW (ICR) | Off/ On(IR Light Off) / On(IR Light On) / Auto1(IR Light Off) / Auto2(IR Light On) / Auto4(LPR) |
| IR LED Light | High / Middle / Low / Off Maximum irradiation distance: When using PoE++ 250 m {Approx. 820 ft} (30IRE)* 180 m {Approx. 591 ft} (50IRE) When using PoE+ 170 m {Approx. 557 ft} (30IRE)* 120 m {Approx. 394 ft} (50IRE) When using DC12V 120 m {Approx. 394 ft} (30IRE)* 85 m {Approx. 279 ft} (50IRE) * Converted value |
| Digital Noise Reduction | The level can be set in the range of 0 to 255. |
| Video Motion Detection (VMD) | On/ Off, 4 areas available |
| Scene Change Detection (SCD) | On/ Off, 1 area available |
| Audio Detection | On/ Off |
| AI Sound Classification | Selectable from Gunshot, Yell, Vehicle horn, Glass break |
| Analytics | AI Video Motion Detection, AI Privacy Guard, AI Face Detection, AI People Detection, AI Vehicle Detection, AI Occupancy Detection, AI Scene Change Detection, AI On-site Learning, AI Processing Relay, License Plate Recognition/MMC classification (3rd party application)*1 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 |
| Max. Number of Applications | 9 |
| Privacy Zone | On/Off, Up to 8 zones available Color : gray/white/blue/green/red/black, or mosaic |
| VIQS | On/Off, Up to 8 zones available |
| Image Rotation | 0° (Off) / 90° / 180° (Upside-down) / 270° |
| Image Stabilizer | On/Off (Built-in gyro sensor) Available only in the 30/25 fps mode |
| Camera Title (OSD) | On/Off Up to 40 characters, Up to 2 lines (alphanumeric characters, marks) |

License Plate Recognition *2

| | |
|-------------------------------------|---|
| Vehicle Speed (Daytime/Nighttime) | Up to 130 km/h {81 mph} * (Distance : 30 m {98 ft}) *For nighttime, when using PoE++ |
| Detection Range (Daytime/Nighttime) | 20 m to 55 m {66 ft to 180 ft} (Vehicle speed : Stopped) *For nighttime, when using PoE++ |

| | |
|------------------------------------|---|
| Installation | [Height] Up to 10 m {33 ft} [Angle] Max. Vertical Angle : 30° Max. Horizontal Angle : 25° Max. Roll Angle : 25° [Horizontal offset from road] Up to 10 m {33 ft} |
| Lens | |
| Optical Zoom | 10x (Motorized zoom / Motorized focus) |
| Digital (electronic) Zoom | max 160x |
| Focal Length | 4.7 mm – 47 mm {3/16 inches – 1-27/32 inches} |
| Angular Field of View | [16:9 mode] Horizontal: 6.6° (TELE) – 62° (WIDE) Vertical: 3.7° (TELE) – 37° (WIDE) [4:3 mode] Horizontal: 5.0° (TELE) – 48° (WIDE) Vertical: 3.7° (TELE) – 37° (WIDE) |
| Adjusting Angle | Ceiling mounting Horizontal : ±180 ° (PAN rotation part) Vertical : 0 ° to 100 ° (TILT rotation part) Yaw : -240 ° to +100 ° (YAW rotation part) Wall mounting Horizontal : ±100 ° (TILT rotation part)* Vertical : ±100 ° (TILT rotation part)* Yaw : -240 ° to +100 ° (YAW rotation part) * You can change between horizontal and vertical angels by adjusting the PAN rotation part. |
| Maximum Aperture Ratio | 1:1.6 (WIDE) – 1:3.0 (TELE) |
| Focus Range | 1.5 m {59-1/16 inches} – ∞ |
| Aperture Range | F1.6 – Close |
| DORI | |
| Detect (25ppm / 8ppf) | 63.7 m {208.8 ft} (WIDE) 666 m {2185 ft} (TELE) |
| Observe (62.5ppm / 19ppf) | 25.5 m {83.5 ft} (WIDE) 266.4 m {874 ft} (TELE) |
| Recognize (125ppm / 38ppf) | 12.7 m {41.8 ft} (WIDE) 133.2 m {437 ft} (TELE) |
| Identify (250ppm / 76ppf) | 6.4 m {20.9 ft} (WIDE) 66.6 m {218.5 ft} (TELE) |
| System on Chip | |
| System on Chip (SoC) | Ambarella CV52 |
| Preset Positions | |
| No. of Preset Positions | 8 |
| Auto Mode | Preset sequence |
| Self Return | 10 s, 20 s, 30 s, 1 min, 2 min, 3 min, 5 min, 10 min, 20 min, 30 min, 60 min |
| Browser GUI | |
| GUI / Setup Menu Language | English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese |
| Browser *3 | Microsoft Edge, Firefox, Google Chrome |
| Network | |
| Network IF | 10BASE-T/100BASE-TX, RJ45 connector |
| Resolution | [16:9 mode(60fps mode)]/[16:9 mode(50fps mode)] 1920x1080/1280x720/640x360/320x180 [16:9 mode(30fps mode)]/[16:9 mode(25fps mode)] 1920x1080/1280x720/640x360/320x180 [4:3 mode(60fps mode)]/[4:3 mode(50fps mode)] 2048x1536*/1280x960/640x480/320x240 [4:3 mode(30fps mode)]/[4:3 mode(25fps mode)] 2048x1536*/1280x960/640x480/320x240 *By super resolution techniques |
| H.265/H.264 Transmission Mode/Type | [Transmission Mode] Constant bit rate/ VBR/ Frame rate/ Best effort [Transmission Type] Unicast port (AUTO) / Unicast port (MANUAL) / Multicast |
| No. of Stream | 4 |
| JPEG (MJPEG) Image Quality | 10 steps: 0 (SUPER FINE) - 9 (LOW) |
| Smart Coding | [GOP(Group of pictures) control] Off/ Low (Variable GOP 1s-8s) / Mid (Variable GOP 4s-16s) / Frame rate control (Variable GOP 4s-16s with frame rate control) *Frame rate control are only available with H.265. [Smart VQoS] On(High)/On(Low)/Off [Smart P-picture control] On/Off |
| Audio Compression Method *4 | G.726 (ADPCM): 16 kbps/ 32 kbps G.711: 64 kbps AAC-LC: 64 kbps/ 96 kbps/ 128 kbps |
| Audio Transmission Mode | Off / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex) |
| 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, LLDP, MQTT IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP, DHCP, DNS, DDNS, NTP, SNMPv1/v2/v3, UPnP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, FTP, SFTP, LLDP, MQTT |
| No. of Simultaneous Users | 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, Secure boot, Signed firmware |
| SDXC/SDHC/SD Memory Card (Option) | microSDXC memory card: 64 GB, 128 GB, 256 GB, 512 GB microSDHC memory card: 4 GB, 8 GB, 16 GB, 32 GB microSD memory card: 2 GB |
| Mobile Terminal Compatibility | iPad / iPhone (iOS 8.0 or later), Android™ terminals |
| ONVIF®Profile | G / M / S / T |
| Alarm | |
| Alarm Source | 3 terminals input, VMD alarm, SCD alarm, Command alarm, Audio detection alarm |
| Alarm Actions | SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, TCP alarm notification output, MQTT alarm notification, FTP/SFTP image transfer, SNMP trap notification |
| Input/Output | |
| Built-in Microphone | - |
| Audio Input *5 | Ø3.5 mm stereo mini jack For microphone input: Recommended applicable microphone: Plug-in power type (Sensitivity of microphone: -51 dB to -38 dB (0 dB=1 V/Pa, 1 kHz)) Input impedance: Approx. 2 kΩ (unbalanced) Supply voltage: 2.5 V ±0.5 V For line input: Input level: Approx. -10 dBV |
| Audio Output *5 | Ø3.5 mm stereo mini jack (Audio output is monaural.) Output impedance: Approx. 600 Ω (unbalanced) Output level: -20 dBV |
| External I/O Terminals *5 | ALARM IN1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN2 (Alarm input 2/ ALARM OUT) (x1) ALARM IN3 (Alarm input 3/ AUX OUT) (x1) |
| Monitor Output | Yes (for adjustment) Pin jack, NTSC or PAL signal can be output from camera |
| General | |
| Safety | UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1 |
| EMC | FCC (Part15 ClassA), ICES-003 ClassA |
| Power Source/Power Consumption *5 | [Power Source] DC12V PoE+(IEEE802.3at compliant) PoE++(IEEE802.3bt compliant) [Power Consumption] DC12V : 1.3A/ Approx. 15.6 W PoE+ DC 54 V : 460 mA/ Approx. 24.8 W (Class 4 device) PoE++ DC 54 V : 600 mA/ Approx. 32.4 W (Class 5 device) |
| Ambient Operating Temperature | -40 °C to +60 °C (-40 °F to +140 °F) (PoE+, PoE+) (Power On range: -30 °C to +60 °C (-22 °F to +140 °F)) * When using with the IR LED light lit, the upper limit of the operating temperature range is +50 °C (+122 °F). *When using DC12V, the lower limit of the operating temperature range is -30°C (-22 °F). |
| Ambient Operating Humidity | 10 % to 100 % (no condensation) |
| Water and Dust Resistance | IP66/ IP67 (IEC 60529), Type 4X (UL50E), NEMA 4X compliant |
| Shock Resistance | IK10(IEC 62262) |
| Vibration Resistance | IEC 60721-3-4 4M4 compliant |
| Wind Resistance | Up to 40 m/s (approx. 89 mph) |
| Dimensions | When the sunshade is in its initial position Φ168 mm x 403 mm (D) {Φ6-5/8 inches x 15-7/8 inches(D)} When moving the sunshade forward Φ168 mm x 456 mm (D) {Φ6-5/8 inches x 17-15/16 inches(D)} |
| Mass (approx.) | Approx. 3.6kg {8.0 lbs} (Including accessories) |
| Finish | Main body: Aluminum die cast, i-PRO white Outer fixing screws: Stainless steel (Corrosion-resistant treatment) Front panel: PC resin, Clear (with ClearSight coating) |
| Easy Kitting | Supported |

NOTES

*1 Vaxtor LPR application (VaxALPR) is pre-installed with a 30-day free trial license.

At the conclusion of the free trial period, a valid license must be purchased in order to continue using the application.

Please contact i-PRO regional representative.

*2 Performance when using Vaxtor LPR app (VaxALPR). Recognition performance could be affected by the installation environment.

*3 For information on the operation verification of the web browsers, refer to our support website <Control No.: C0132>.

*4 When recording audio on an SD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity) .

*5 When using a 12 V DC power supply, EXT I/O terminal, audio input, and audio output, I/O cable (WV-QCA501A) is required.

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 any third-party products (including applications) used on the network.

- Masses and dimensions are approximate.

- Specifications are subject to change without notice.

Trademarks and registered trademarks

- iPad and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries. - Android is a trademark of Google LLC.
- ONVIF is a trademark of ONVIF, Inc.
- All other trademarks identified herein are the property of their respective owners
©i-PRO Co., Ltd All rights reserved / October 2024

OPTIONAL ACCESSORIES

Select a compatible accessory

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



WV-QPL500-W
Mount Bracket



WV-QCN500-W
Mount Bracket



WV-QCL101-W
Mount Bracket



WV-QCL100-W
Mount Bracket



WV-Q105A
Mount Bracket



WV-SDB256G
i-PRO SD Memory Card



WV-SDB128G
i-PRO SD Memory Card



WV-SDB064G
i-PRO SD Memory Card



WV-SDB032G
i-PRO SD Memory Card



WV-QCA501A
I/O Cable



WV-PM500
Compact microphone unit



WV-PU201P
PoE Injector



WV-PU201/G
PoE Injector

APPEARANCE

