

# WV-U85402-V2L1

2 x 4MP IR Outdoor Multi-directional Network Camera

## Multi-directional dual sensor camera



- 2 x 4MP Multi-directional camera
- One IP address, One VMS license
- Built-in IR-LED (40m, 131ft)
- Wide angle of view (Horizontal 100°)
- Corridor mode (90 degrees or 270 degrees in image rotation)
- IP66, IP67, IK10 certified
- Built-in FIPS 140-2 Level 3 Certified SecureElement with TPM functionality (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

[Learn More](#)



# SPECIFICATIONS

| Camera  |  |
|---|--|
| Image Sensor                                    | 2x 1/2.7 type CMOS image sensor  |
| Minimum Illumination                            | Color : 0.21 lx (30IRE, F2.0, 1/30 s)<br>Color : 0.3 lx (50IRE, F2.0, 1/30 s)<br>BW : 0.12 lx {50IRE, F2.0, 1/30 s}<br>BW : 0 lx {50IRE, F2.0, 1/30 s with IR LED} |
| White Balance                                   | ATW1/ ATW2/ AWC  |
| Maximum shutter                                 | 30 fps mode:<br>Max.1/10000s to Max.16/30s<br>25 fps mode:<br>Max.1/10000s to Max.16/25s   |
| Intelligent Auto                                | On / Off   |
| Super Dynamic                                   | On / Off,<br>The level can be set in the range of 0 to 31.   |
| Dynamic Range                                   | 108 dB max.<br>(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/ HLC/ Off<br>The level can be set in the range of 0 to 31.<br>(only when Super Dynamic/ Intelligent Auto: Off)   |
| Fog Compensation                                | On/ Off<br>The level can be set in the range of 0 to 8.<br>(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)/<br>Auto3(SCC)   |
| IR LED Light                                    | High/Middle/Low/Off<br>Maximum irradiation distance :<br>40 m {Approx. 131 ft} (30IRE)*<br>30 m {Approx. 99 ft} (50IRE)<br>* Converted value                       |
| Digital Noise Reduction                         | The level can be set in the range of 0 to 255.   |
| Video Motion Detection (VMD)                    | On / Off,<br>4 areas available   |
| Scene Change Detection (SCD)                    | On / Off,<br>1 areas available   |
| Audio Detection                                 | On/Off   |
| AI Sound Classification                         | -  |
| AI Analytics                                    | -  |
| Privacy Zone                                    | On/ Off<br>(up to 8 zones available)   |
| VIQS  | On / Off,<br>Up to 8 zones available   |
| Image Rotation                                  | 0° (Off)/ 90°/ 180° (Upside-down)/ 270°  |

|                    |   |
|--------------------|---|
| Camera Title (OSD) | On/ Off,<br>Up to 40 characters, Up to 2 Lines (alphanumeric characters, marks) |
| Focus Adjustment   | Auto focus  |

### Lens

|                        |   |
|------------------------|---|
| Optical zoom           | 2.5x<br>(Motorized zoom / Motorized focus)                                |
| Extra zoom             | max 10.5x<br>(when resolution is 640 x 360)                               |
| Focal length           | 2.9 mm{1/8 inches} – 7.3 mm{1/4 inches}                                   |
| Angular Field of View  | Horizontal : 43 ° (TELE)-100°(WIDE)<br>Vertical : 24 ° (TELE) - 56°(WIDE) |
| Maximum Aperture Ratio | 1 : 2.0 (WIDE) - 1 : 3.0 (TELE)   |
| Focus range            | 1 m {3.28 ft} – ∞   |

### DORI

|                            |   |
|----------------------------|---|
| Detect (25ppm / 8ppf)      | Wide: 45.1 m / 148 ft, Tele: 136.5 m / 447.8 ft |
| Observe (62.5ppm / 19ppf)  | Wide: 18.0 m / 59.2 ft, Tele: 54.6 m / 179.1 ft |
| Recognize (125ppm / 38ppf) | Wide: 9.0 m / 29.6 ft, Tele: 27.3 m / 89.6 ft   |
| Identify (250ppm / 76ppf)  | Wide: 4.5 m / 14.8 ft, Tele: 13.6 m / 44.8 ft   |

### System on Chip (SoC)

|                      |                |
|----------------------|----------------|
| System on Chip (SoC) | Ambarella CV22 |
|----------------------|----------------|

### Adjusting Angle

|                 |  |
|-----------------|--|
| Adjusting Angle | Camera 1, 2:<br>Horizontal: -50° to +230° (Adjust by horizontal (PAN) angle)<br>Vertical: +10° to +105° (Adjust by vertical (TILT) angle)<br>Yaw: ±90° (Adjust by azimuth (YAW) angle) |
|-----------------|--|

### Browser GUI

|                           |  |
|---------------------------|--|
| Camera Control            | Brightness, AUX On / Off   |
| Audio                     | Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High<br>Audio Output : On / Off Volume adjustment : Low / Middle / High |
| GUI / Setup Menu Language | English, Italian, French, German, Spanish, Portuguese, Russian,<br>Chinese, Japanese   |
| Browser                   | Microsoft Edge, Firefox, Google Chrome *1  |

### Network

|                                       |   |
|---------------------------------------|---|
| Network IF                            | 10BASE-T/100BASE-TX/1000BASE-T, RJ45 connector  |
| Resolution H.265/ H.264/ JPEG (MJPEG) | [16:9 mode]<br>2688 x 1520 / 2560x1440 / 1920 x 1080 / 1280 x 720 / 640x360/320x180   |
| H.265/H.264                           | [Transmission Mode]<br>Constant bit rate / VBR / Frame rate / Best effort<br>[Transmission Type]<br>Unicast port (AUTO) / Unicast port (MANUAL) / Multicast |
| JPEG                                  | [Image Quality]<br>10 steps   |

|                               |   |
|-------------------------------|---|
| Smart Coding                  | GOP(Group of pictures) control :<br>Off/ Low (Variable GOP 1s-8s)/ Mid (Variable GOP 4s-16s)/Advanced (Fixed GOP 60 seconds with 1 second Key frame)/Frame rate control (Variable GOP 4s-16s with frame rate control)<br>*Advanced and Frame rate control are only available with H.265.<br>Auto VIQS :<br>On/Off |
| Audio Compression             | G.726 (ADPCM) 32 kbps/16 kbps,<br>G.711 64 kbps,<br>AAC-LC 64kbps/96kbps/128kbps *2   |
| 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, LLDP, MQTT   |
| No. of Simultaneous Users     | 24 (Number of sessions that can connect to cameras at the same time)  |
| 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  |
| SDXC/SDHC/SD Memory Card      | microSDXC memory card : 64 GB, 128 GB, 256 GB, 512 GB<br>microSDHC memory card : 4 GB, 8 GB, 16 GB, 32 GB<br>microSD memory card : 2 GB   |
| Mobile Terminal Compatibility | iPad / iPhone (iOS 8.0 or later), Android™ terminals  |
| ONVIF® Profile                | G / 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 |

| Input/Output                    |  |
|---------------------------------|--|
| Monitor Output (for Adjustment) | —  |
| Audio input *3                  | ø3.5 mm stereo mini jack<br>For microphone input :<br>Recommended applicable microphone : Plug-in power type<br>(Sensitivity of microphone : -48 dB±3 dB (0 dB=1 V/Pa, 1 kHz))<br>Input impedance : Approx. 2 kΩ (unbalanced)<br>Supply voltage : 2.4 V ±0.5 V<br>For line input :<br>Input level: Approx. -10 dBV |
| Audio Output *3                 | ø3.5 mm stereo mini jack (Audio output is monaural.)<br>Output impedance: Approx. 600 Ω (unbalanced)<br>Output level: -20 dBV  |
| External I/O Terminals *3       | ALARM IN 1<br>(Alarm input 1/ Black & white input/ Auto time adjustment input) (x1)<br>ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1)<br>ALARM IN 3 (Alarm input 3/ ALARM OUT /AUX OUT) (x1)   |

| General                            |   |
|------------------------------------|---|
| Safety                             | UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1   |
| EMC                                | FCC (Part15 ClassA), ICES-003 ClassA, EN55032 ClassA, EN55024   |
| Power Source and Power Consumption | PoE+ (IEEE802.3at compliant) :<br>DC 54 V : 350 mA/Approx. 18.9 W (Class 4 device)  |
| Ambient Operating Temperature      | -40 °C to +60 °C* {-40 °F to 140 °F}(Power On range: -20 °C to +60 °C {-4 °F to 140 °F})<br>Maximum temperature according to NEMA TS 2 (2.2.7) : 74°C(165°F)<br>*When using with the IR LED light constantly lit, the upper limit of the operating temperature range is +50 °C {+122 °F}. |
| Ambient Operating Humidity         | 10 % to 100 % (no condensation)   |

|                           |   |
|---------------------------|---|
| Anti-Condensation System  | Temish element  |
| Water and Dust Resistance | IP67/IP66 (IEC 60529), Type 4X (UL50E), NEMA 4X compliant   |
| Shock Resistance          | IK10 (IEC 62262)  |
| Other standard support    | NEMA TS 2 (2.2.7-2.2.9)   |
| Dimensions                | When using the attachment plate only:<br>250 mm (D) × 150 mm (W) × 105 mm (H) {9-27/32" inches (D) × 5-29/32 inches (W) × 4-1/8 inches (H)} |
| Mass (approx.)            | Approx. 1.8 kg  |
| Finish                    | Main body: Aluminum die cast, Black<br>Outer fixing screws: Stainless steel (Corrosion-resistant treatment)<br>Dome cover: PC resin, Clear  |

## NOTES

\*1 For information on the operation verification of the web browsers, refer to our support website <Control No.: C0132>.

\*2 When recording audio on an SD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity) .

\*3 When using with them, WV-QCA501A cable 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 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/Accessory_Selector).



WV-CR1S  
Dome Cover



WV-QDC200C  
Dome Cover



WV-QSR507-B  
Mount Bracket



WV-QWL501-B  
Mount Bracket



WV-QPL500-B  
Mount Bracket



WV-QCN500-B  
Mount Bracket



WV-QSR507F1-B  
Mount Bracket



WV-QCL101-B  
Mount Bracket



WV-QCL501-B  
Mount Bracket



WV-QSR507M1-B  
Mount Bracket



WV-QSR507F-B  
Mount Bracket



WV-QCL100-B  
Mount Bracket



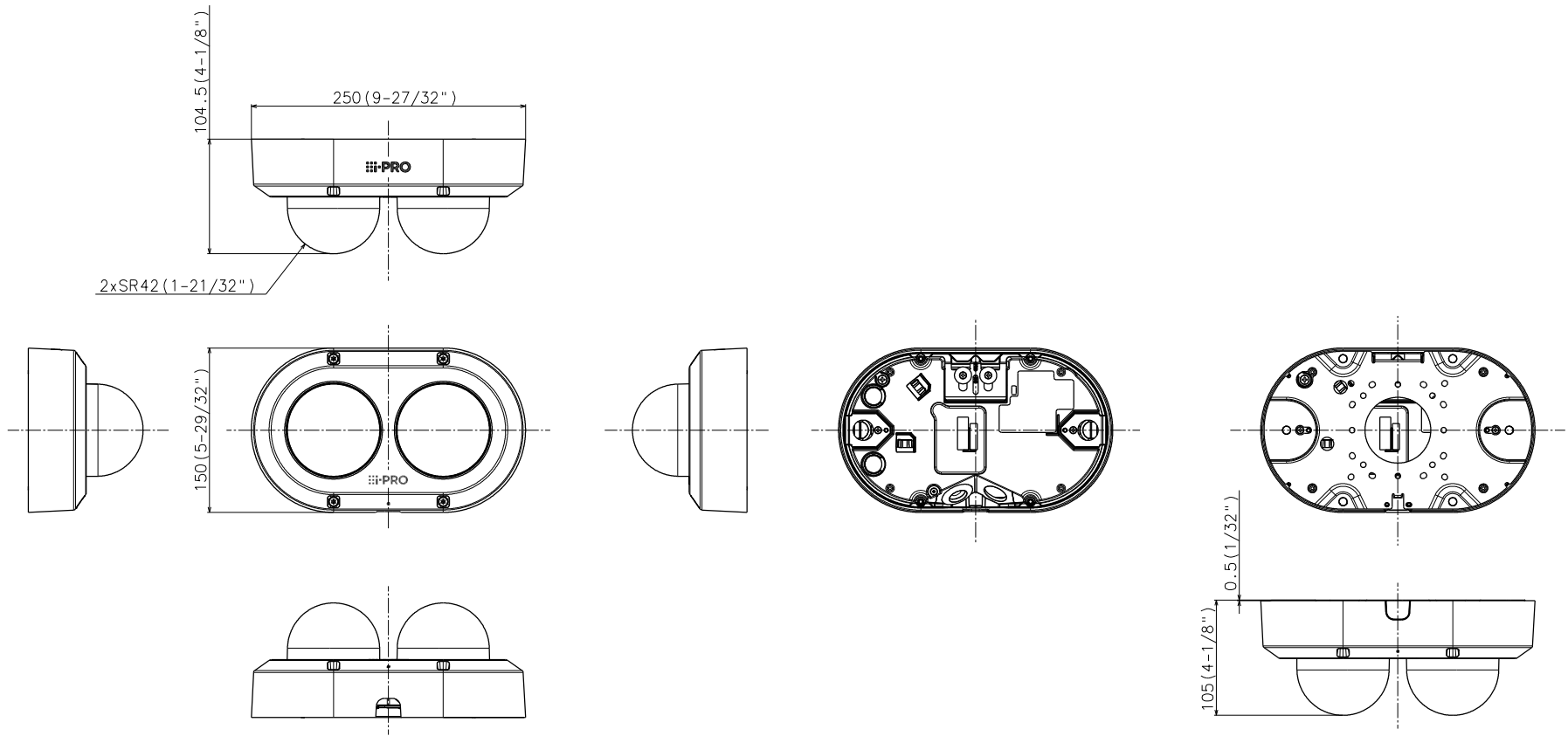
WV-QSR507M-B  
Mount Bracket



WV-Q105A  
Mount Bracket



WV-QCA501A  
I/O Cable



With attachment plate

Unit:mm



|               | 投影面積/Projected area     |
|---------------|-------------------------|
| 平面図/Top-view  | 0.020 (m <sup>2</sup> ) |
| 側面図/Side-view | 0.011 (m <sup>2</sup> ) |

Mass : Approx. 1.6 kg {3.53 lbs} (When using the attachment plate)