# WV-S85402-V2L

2 x 4MP IR Outdoor Multi-directional Network Camera with AI Engine

#### Multi-directional dual sensor camera



- 2 x 4MP Multi-directional camera
- One IP address, One VMS license
- Up to 4 Edge AI analytic apps
- 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

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### **SPECIFICATIONS**

| mage 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: Max.1/10000s to Max.16/30s<br>25 fps mode: Max.1/10000s to Max.16/25s  |  |  |
| ntelligent 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<br>.ight 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)   |  |  |
| og 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)/Auto3(SCC)  |  |  |
| R 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.  |  |  |
| /ideo Motion Detection (VMD)                       | On / Off,<br>4 areas available  |  |  |
| Scene Change Detection (SCD)                       | On / Off,<br>1 areas available  |  |  |
| Audio Detection                                    | On/Off  |  |  |
| Al Sound Classification                            | Selectable from Gunshot, Yell, Vehicle horn, Glass break  |  |  |
| Al Analytics                                       | Al Video Motion Detection, Al Privacy Guard, Al Face Detection,<br>Al People Detection, Al Vehicle Detection,<br>Al Non mask Detection, Al Occupancy Detection, Al Scene Change Detection                                   |  |  |
|  | For details<br>https://i-pro.com/global/en/surveillance/products/i-pro-ai-application<br>3rd party applications are also available.<br>https://i-pro.com/global/en/surveillance/i-pro-application-platform/application-list |  |  |
| vacy 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, Up to 40 characters, Up to 2 Lines (alphanumeric characters, marks)   |  |  |
| Focus Adjustment                         | Auto focus   |  |  |
| Lens                                     |  |  |  |
| Optical zoom                             | 2.5x (Motorized zoom / Motorized focus)  |  |  |
| Extra zoom                               | max 10.5x (when resolution is 640x360)   |  |  |
| 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 CV2  |  |  |
| 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<br>(MJPEG) | [16:9 mode]<br>2688 x 1520 / 2560x1440 / 1920 x 1080 / 1280 x 720 / 640×360/320×180  |  |  |
| 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<br>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>Smart VIQS :<br>On(High) / On(Low) / Off<br>Smart P-picture control :<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-installe<br>HTTPS, User authentication, Digest authentication, Host authentication,<br>IEEE802.1X, System log, Image transmission log, Brute-force protection, Alteration<br>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), AndroidTM 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,<br>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 k $\Omega$ (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 $\Omega$ (unbalanced)<br>Output level: –20 dBV  |  |  |
| External I/O Terminals *3             | ALARM IN 1 (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<br>Consumption | PoE+ (IEEE802.3at compliant) :<br>DC 54 V : 410 mA/Approx. 22.2 W (Class 4 device)  |  |  |
| Ambient Operating Temperature         | <ul> <li>-40 °C to +60 °C* {-40 °F to 140 °F} (Power On range: -20 °C to +60 °C {-4 °F to 140 °F})</li> <li>Maximum temperature according to NEMA TS 2 (2.2.7) : 74°C (165°F)</li> <li>*When using with the IR LED light constantly lit, the upper limit of the operating temperature range is +50 °C {+122 °F}.</li> </ul>   |  |  |
|                                       |   |  |  |

| 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: 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, i-PRO white<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)



WV-CR1S

Dome Cover

WV-QDC200C Dome Cover



WV-QSR507F1-W Mount Bracket



PWM25W Mount Bracket/Only available in US



WV-QSR507-W Mount Bracket



WV-QWL501-W Mount Bracket



PAPM4W Mount Bracket/Only available in US

ΔΩ,

WV-QPL500-W Mount Bracket



PACA4W Mount Bracket/Only available in US



WV-QCN500-W Mount Bracket



WV-QCL101-W Mount Bracket



WV-QCL501-W Mount Bracket



WV-QSR507M1-W

Mount Bracket

WV-QSR507F-W

Mount Bracket



WV-QCL100-W Mount Bracket



WV-QSR507M-W

Mount Bracket

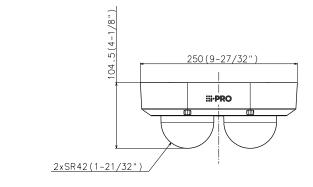


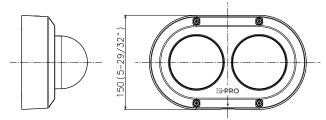
WV-Q105A Mount Bracket

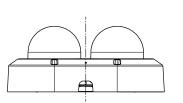


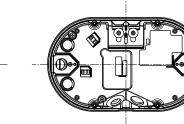


WV-QCA501A I/O Cable

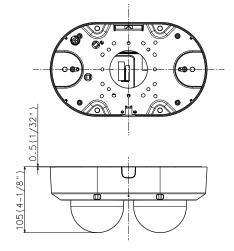








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<u>With attachment plate</u>

|                |                       | 投影面積/Projected           | area                  |
|----------------|-----------------------|--------------------------|-----------------------|
| Unit:mm        | 平面図/Top-view          | 0.020(m <sup>2</sup> )   |                       |
| $\square$      | 側面図/Side-view         | 0.011(m²)                |                       |
| $\Psi \square$ | Mass : Approx. 1.6 kg | {3.53 lbs} (When using t | ihe attachment plate) |