

# WV-U85402-V2L

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 Compliant SecureElement with TPM functionality (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

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# SPECIFICATIONS

Camera	
Image Sensor	2x 1/2.7 type CMOS image sensor
Minimum Illumination	Color : 0.21 lx (30IRE, F2.0, 1/30s, AGC:11)* 0.3 lx (50IRE, F2.0, 1/30s, AGC:11) 0.019 lx (50IRE, F2.0, 16/30s, AGC:11)*  BW : 0 lx (50IRE, F2.0, 1/30s, AGC:11, IR LED: On) 0.12 lx (50IRE, F2.0, 1/30s, AGC:11) 0.0075 lx (50IRE, F2.0, 16/30s, AGC:11)* *Converted value
White Balance	ATW1/ ATW2/ AWC
Maximum shutter	30 fps mode: Max.1/10000s to Max.16/30s 25 fps mode: Max.1/10000s to Max.16/25s
Intelligent Auto	On / Off
Super Dynamic	On / Off, The level can be set in the range of 0 to 31.
Dynamic Range	108 dB max. (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 The level can be set in the range of 0 to 31. (only when Super Dynamic/ Intelligent Auto: Off)
Fog Compensation	On/ Off The level can be set in the range of 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)/Auto3(SCC)
IR LED Light	High/Middle/Low/Off Maximum irradiation distance : 40 m {Approx. 131 ft} (30IRE)* 30 m {Approx. 99 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 areas available
Audio Detection	On/Off
AI Sound Classification	-
AI Analytics	-
Privacy Zone	On/ Off (up to 8 zones available)

VIQS	On / Off, 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 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) 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
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### Adjusting Angle

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

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
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] 2688 x 1520 / 2560x1440 / 1920 x 1080 / 1280 x 720 / 640x360/320x180
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 : 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) *Advanced and Frame rate control are only available with H.265. Auto VIQS : On/Off
Audio Compression	G.726 (ADPCM) 32 kbps/16 kbps, G.711 64 kbps, 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 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, 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, Signed Firmware
SDXC/SDHC/SD Memory Card	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 / 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

Audio input *3	ø3.5 mm stereo mini jack For microphone input : 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 : 2.4 V ±0.5 V For line input : Input level: Approx. -10 dBV
Audio Output *3	ø3.5 mm stereo mini jack (Audio output is monaural.) Output impedance: Approx. 600 Ω (unbalanced) Output level: -20 dBV
External I/O Terminals *3	ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1) ALARM IN 3 (Alarm input 3/ ALARM OUT /AUX OUT) (x1)
Monitor Output	-
Wi-Fi USB Adapter	Yes (for adjustment)

### 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, EN55035
Power Source and Power Consumption	PoE+ (IEEE802.3at compliant) : 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}) Maximum temperature according to NEMA TS 2 (2.2.7) : 74°C(165°F) *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)
Wind Resistance	Up to 40 m/s {approx. 89 mph}
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 Outer fixing screws: Stainless steel (Corrosion-resistant treatment) 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)



**WV-QWL506-W**  
4-screw Wall Mount  
Bracket



**WV-QWL506M1-W**  
ANSI Male Wall Mount  
Bracket (1.5\"/>



**WV-QWL501-W**  
Mount Bracket



**WV-QSR507M1-W**  
Mount Bracket



**WV-QSR507M-W**  
Mount Bracket



**WV-QSR507F1-W**  
Mount Bracket



**WV-QSR507F-W**  
Mount Bracket



**WV-QSR507-W**  
Mount Bracket



**WV-QPL500-W**  
Mount Bracket



**WV-QCN500-W**  
Mount Bracket



**WV-QCL501-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-QDC504C**  
Dome Cover



**WV-QCA501A**  
I/O Cable



**WV-PM500**  
Compact microphone  
unit



**WV-CW7SN**  
Dome cover

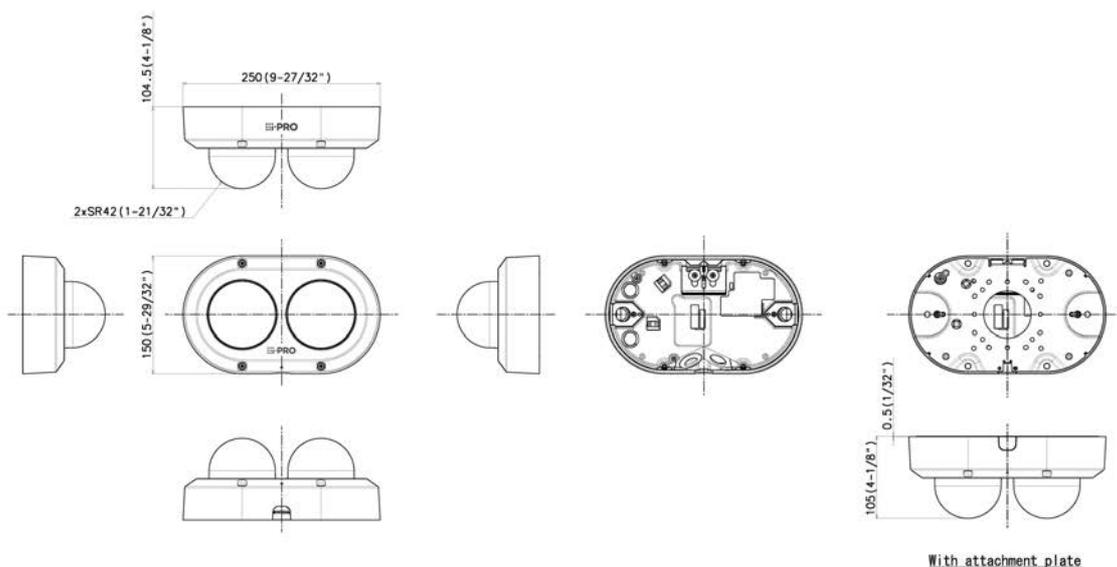


**WV-CW7S**  
Dome cover



**WV-CW7CN**  
Dome cover

# APPEARANCE



With attachment plate

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)	

Unit:mm