WV-S85403A-V2LG

3 x 4MP AI Outdoor IR Multi-directional Camera (2.5x zoom)

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- 3 x 4MP(12MP) 2688x1520 up to 30fps
- Built-in IR-LED （15m, 49ft）
- Up to 4 Edge AI analytic apps
- 270° coverage with one IP address
- Wide range tilt angle adjustment mechanism
- IP66, IP67, IK10 Compliant
- Built-in FIPS 140-3 Level 3, CC EAL6+ Compliant Secure Element (NXP® EdgeLock®SE052F)
- NDAA Compliant

i-PRO

SPECIFICATIONS

Camera	
Image Sensor	3x 1/2.7 type CMOS image sensor
Scanning Area	5.38 mm(H) x 3.02 mm(V) {7/32 inches(H) × 1/8 inches(V)}
Minimum Illumination	Color : 0.59 lx (30IRE, F2.0, 1/30s, AGC:11)* 0.85 lx (50IRE, F2.0, 1/30s, AGC:11) 0.053 lx (50IRE, F2.0, 16/30s, AGC:11)* BW : 0 lx (50IRE, F2.0, 1/30s, AGC:11, IR LED: On) 0.34 lx (50IRE, F2.0, 1/30s, AGC:11) 0.021 lx (50IRE, F20, 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	Max. 108 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 (only when Super dynamic / Intelligent Auto : Off)
Fog Compensation	On / Off (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: When using PoE+ 15 m {Approx. 49 ft} (30IRE)* 11 m {Approx. 36 ft} (50IRE) When using PoE 8 m {Approx. 26 ft} (30IRE)* 6 m {Approx. 19 ft} (50IRE)* * Converted value
Digital Noise Reduction	The level can be set in the range of 0 to 255.
Panorama	Panorama mode (H: 170 deg.)
Video Motion Detection (VMD)	On / Off, 4 areas available
Scene Change Detection (SCD)	On / Off, 1 areas available
Audio Detection	-
AI Sound Classification	Selectable from Gunshot, Yell, Vehicle horn, Glass break

AI Analytics	AI Video Motion Detection, AI Face Detection, AI People Detection, AI Vehicle Detection, AI Non mask Detection (prior to V2.70), AI Occupancy Detection, AI 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
Max. Number of Applications	4
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)
Digital (electronic) zoom	max 10.5x
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 / 148.0 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, 3 : Horizontal : ±125° (Adjust by horizontal (PAN) angle) Vertical : +10° to +105° (Adjust by vertical (TILT) angle) Yaw : ±90° (Adjust by azimuth (YAW) angle) Twist : ±30° *The above is the adjustable range of a single camera. The adjustable range of each camera varies according to the positional relationship with other cameras.

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

Network

Network IF	10Base-T / 100Base-TX / 1000Base-T, RJ45 connector
Resolution H.265/ H.264/ JPEG (MJPEG)	[16 : 9 mode] 2688 x 1520 / 2560 x 1440 / 1920×1080 /1280 x 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. Smart VIQS: On(High)/On(Low)/Off, Smart P-picture control: On/Off
Audio Compression	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, 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	Up to 24 users (Depends on network conditions)
Secure	FIPS 140-3 level 3, CC EAL6+ (NXP® EdgeLock® SE052F), 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	H.265 / H.264 recording : Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure JPEG recording : Manual REC / Alarm REC (Pre/Post) / Backup upon network failure Compatible 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, 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

Input/Output	
Audio input	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	ø3.5 mm stereo mini jack (Audio output is monaural.) Output impedance: Approx. 600 Ω (unbalanced) Output level: -20 dBV
External I/O Terminals	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 DC 48 V : 270 mA / Approx. 12.95 W (Class 0 device) PoE+ (IEEE802.3at compliant): DC 54 V : 470 mA / Approx. 25.4 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)
Ambient Operating Humidity	10 to 100 % (no condensation)
Storage Temperature & Humidity	Storage temperature: -30 °C to +60 °C {-22 °F to +140 °F} Storage humidity: 10 % to 95 % (no condensation)
Anti-Condensation System	Temish element + Heater + moisture absorption gel
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 : ø300 mm × 90 mm (H) {ø11-13/16 inches ×3-17/32 inches (H)}
Mass (approx.)	When using the attachment plate only: (3eyes): Approx. 3.1 kg {6.83 lbs}
Finish	Main body: Aluminum die cast, i-PRO white Outer fixing screws: Stainless steel (Corrosion-resistant treatment) Dome cover: PC resin, Smoke

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)

WV-QWL506-W
4-screw Wall Mount Bracket

WV-QWL506M1-W
ANSI Male Wall Mount Bracket (1.5”NPT)

WV-QWL501-W
Mount Bracket

WV-QSR503-W
Mount Bracket

WV-QSR503M-W
Mount Bracket

WV-QSR503M1-W
Mount Bracket

WV-QSR503F-W
Mount Bracket

WV-QSR503F1-W
Mount Bracket

WV-QPL500-W
Mount Bracket

WV-QJB503-W
Base 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

PPRM35AW
Parapet Mount Bracket

WV-SDB256G
i-PRO SD Memory Card

WV-SDB128G
i-PRO SD Memory Card

WV-SDB064G
i-PRO SD Memory Card

WV-QCA501A
I/O Cable

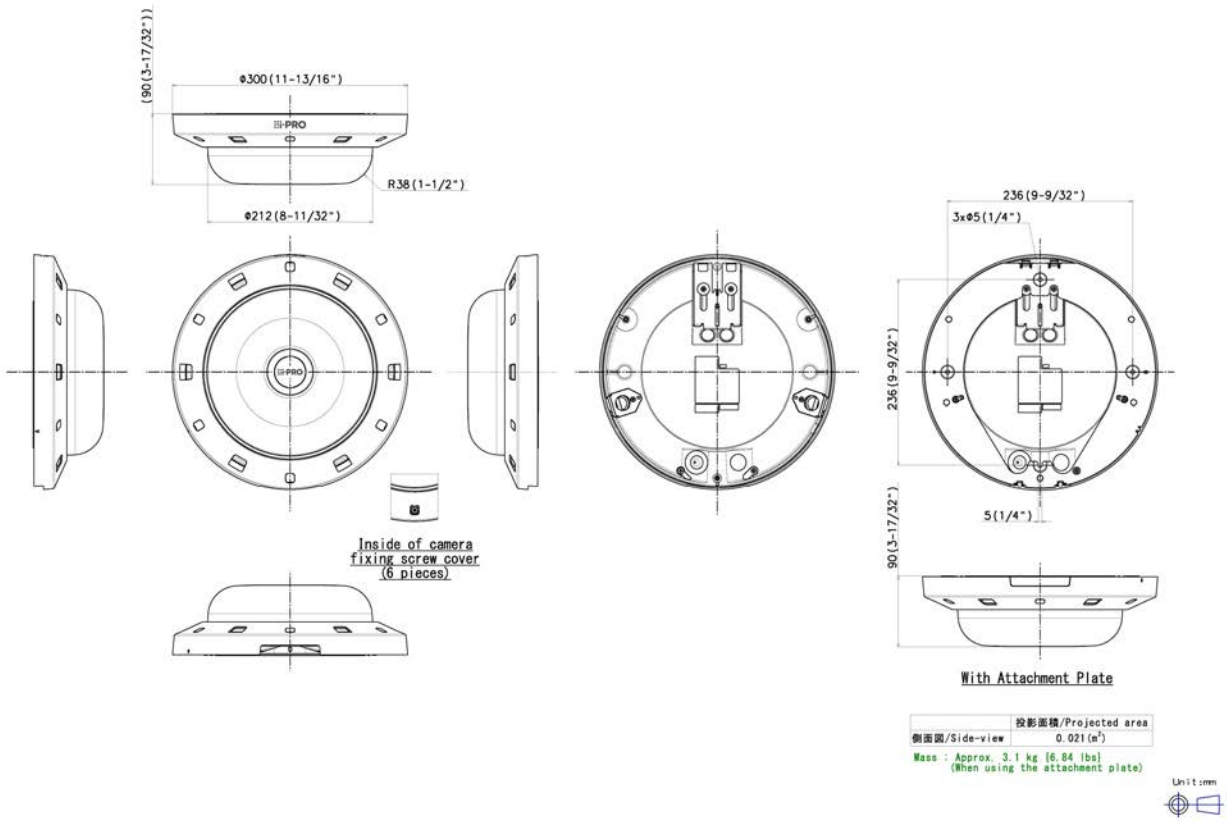
WV-PM500
Compact microphone unit

WJ-PU201P
PoE Injector

WJ-PU201F/G
PoE Injector

WJ-PU201/G
PoE Injector

APPEARANCE


(90(3-17/32"))
Φ300(11-13/16")
R38(1-1/2")
Φ212(8-11/32")
Inside of camera
fixing screw cover
(6 pieces)
236(9-9/32")
3xΦ5(1/4")
236(9-9/32")
5(1/4")
90(3-17/32")
With Attachment Plate
投影面積/Projected area
側面図/Side-view
0.021(m²)
Mass : Approx. 3.1 kg [6.84 lbs]
(When using the attachment plate)
Unit:mm

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