WV-X66300-Z4LK

2MP Outdoor 40x PTZ Network Camera with AI engine

Rapid PTZ camera with AI engine and IR-LED

- 2MP 40x PTZ camera
- Innovative New Form Factor PTZ
- Up to 2 Edge AI analytic apps
- AI auto tracking
- Built-in IR-LED (250 m {Approx. 820 ft} (50IRE))
- High speed Pan/Tilt drive (Pan: 700deg./s, Tilt: 500deg./s)
- Heavy salt damage resistance specifications (ISO 14993 compliant)
- IP66, IK10 certified
- Built-in FIPS 140-2 Level 3 Compliant SecureElement (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant
- Support POE+ (IEEE 802.3at compliant) Function-limited mode for flexibility and enabling wider installation choices

Precautions for heavy salt damage resistance

SPECIFICATIONS

Camera	
Image Sensor	Approx. 1/2.8 type CMOS image sensor
Scanning Area	5.57 mm (H) × 3.13 mm (V) {7/32 inches (H) × 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) 0.001 lx (50IRE, F1.6, 16/30s, AGC:11)* BW : 0 lx (50IRE, F1.6, 1/30s, AGC:11, IR LED: On) 0.006 lx (50IRE, F1.6, 1/30s, AGC:11) 0.0004 lx (50IRE, F1.6, 16/30s, AGC:11)* *Converted value
White Balance	ATW1 / ATW2 / AWC
Shutter Speed	[60fps mode] 1/60 Fix to 1/10000 Fix [50fps mode] 1/50 Fix to 1/10000 Fix
Maximum shutter	60 fps/30 fps/15 fps mode: Max.1/4000s to Max.16/30s 50 fps/25 fps/12.5 fps mode: Max.1/4000s 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.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 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: 350 m {Approx. 1150 ft} (30IRE)* 250 m {Approx. 820 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	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
Privacy Zone	On / Off, Up to 32 zones available
VIQS	On / Off, Up to 8 zones available
Image Stabilizer	On / Off (Built-in gyro sensor)
Camera Title (OSD)	On / Off, Up to 40 characters (alphanumeric characters, marks)

Lens	
Optical zoom	40x (Motorized zoom / Motorized Focus)
Extra zoom	Max.60x (40x-60x when resolution is 1280x720)
Digital (electronic) Zoom	60x - 640x
Focal length	4.25 - 170 mm {5/32 inches - 6-11/16 inches}
Angular Field of View	[16 : 9 mode] Horizontal : 2.0° (TELE) – 65° (WIDE), Vertical : 1.2° (TELE) – 39° (WIDE)(TBD) [4 : 3 mode] Horizontal : 1.5° (TELE) – 51° (WIDE), Vertical : 1.2° (TELE) – 39° (WIDE)(TBD)
Maximum Aperture Ratio	1 : 1.6 (WIDE) – 1 : 4.95 (TELE)
Focus range	3.0 m {118-1/8 inches} –∞
Aperture range	F1.6 - close

DORI	
Detect (25ppm / 8ppf)	Wide: 60.3 m / 197.8 ft, Tele: 2199.9 m / 7217.6 ft
Observe (62.5ppm / 19ppf)	Wide: 24.1 m / 79.1 ft , Tele: 880.0 m / 2887.1 ft
Recognize (125ppm / 38ppf)	Wide: 12.1 m / 39.6 ft, Tele: 440.0 m / 1443.5 ft
Identify (250ppm / 76ppf)	Wide: 6.0 m / 19.8 ft, Tele: 220.0 m / 721.8 ft

System on Chip (SoC)	
System on Chip (SoC)	Ambarella CV25m

Adjusting Angle	
Adjusting Angle	Horizontal : 360° Endless Panning, TILT : -20° to +90°, Yaw : 0°

Pan /tilt	
Panning Range	360° Endless Panning
Panning Speed	Manual ：Approx. 0.065 °/s – 150 °/s (PoE++), Approx. 0.065 °/s – 90 °/s (PoE+) Preset ：Up to 700 °/s (PoE++), Up to 90 °/s (PoE+)
Tilting Range	Operational -20° – +90°
Tilting Speed	Manual ：Approx. 0.065 °/s – 150 °/s (PoE++), Approx. 0.065 °/s – 90 °/s (PoE+) Preset ：Up to 500 °/s (PoE++), Up to 90 °/s (PoE+)
Preset Positions	256 positions
Auto Mode	Auto track/ Auto pan/ Preset sequence/ Patrol
Self Return	10 s/ 20 s/ 30 s/ 1 min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 30 min/ 60 min

Active ClearSight	Yes

Browser GUI	
GUI / Setup Menu Language	English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese
Browser *1	Microsoft Edge, Firefox, Google Chrome

Network	
Network IF	10Base-T / 100Base-TX, RJ45 connector
Resolution H.265/ H.264/ JPEG (MJPEG)	[16:9 mode (60fps mode)],[16:9 mode (30fps mode)], [16:9 mode (50fps mode)],[16:9 mode (25fps mode)] 1920x1080, 1280x720, 640x360, 320x180 [4:3 mode (30 fps mode)], [4:3 mode (25 fps mode)] 1280x960, VGA, QVGA [4:3 mode (15 fps mode)], [4:3 mode (12.5 fps mode)] 2048x1536* , 1280x960, VGA, QVGA *Used bu super resolution techniques
H.265/H.264 Transmission Mode/Type *2	[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 60s w/1s key-frame)/ Frame rate control (Variable GOP 4s-16s with frame rate control) *Advanced and Frame rate control are only available with H.265. Smart VIQS: On(High)/On(Low)/Off, Smart P-picture control: On/Off
Audio compression method *3	G.726 (ADPCM) : 16 kbps / 32 kbps G.711 : 64 kbps AAC-LC*5 : 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 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, MQTT, NTCIP
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, Signed Firmware
SDXC/SDHC/SD Memory Card (Option)	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 (iOS 8.0 or later), Android™ terminals
ONVIF® Profile	G / M / S / T

Alarm	
Alarm Source	3 terminals input, VMD 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 *4	ø3.5 mm stereo mini jack Recommended applicable microphone: Plug-in power type (Sensitivity of microphone:-51dB to -38dB (0 dB=1 V/Pa, 1 kHz)) Input impedance: Approx. 2 kΩ (unbalanced) Supply voltage: 4.0V±0.5V For line input : Input level : Approx. –10 dBV
Audio Output *4	ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600Ω (unbalanced) Output level : –20 dBV
External I/O Terminals *4	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/ 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 Issue 7 ClassA, EN55032 ClassA, EN55035
Other Standard	NEMA-TS2
Power Source and Power Consumption	[Power Source] PoE++ (IEEE802.3bt compliant), PoE+ (IEEE802.3at compliant) [Power Consumption] [Ambient operating temperature -50 to 65°C] PoE++DC54V :850 mA/Approx. 45.9 W (Class 6 device) [Ambient operating temperature -20 to 65°C] PoE+DC54V :470 mA/Approx. 25.4 W(Class 4 device)
Ambient Operating Temperature	-50 °C to +60 °C * {-58 °F to +140 °F} (Power On range : –30 °C to +60 °C {–22 °F to +140 °F}) (PoE++ Class 6) -20 °C to +60 °C * {-4 °F to +140 °F}(PoE+ Class 4) 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)
Water and Dust Resistance	IP66, IEC60529 measuring standard compatible, Type 4X(UL50E), NEMA 4X compliant
Shock Resistance	IK10 (IEC 62262)
Wind Resistance	Up to 40 m/s {approx. 89 mph}
Dimensions	Maximum diameter:φ167mm × 205 mm (H){φ6-9/16 inches × 8-1/16 inches (H)} Dome radius SR 77.5 mm {SR 3-1/16 inches} (excluding an attachment for the conduit portion and protruding parts)
Mass (approx.)	Approx. 3 kg (without attachment)
Finish	Main body : Aluminum die cast (Heavy-salt damage resistance coating), i-PRO white Outer fixing screws : Stainless steel (Corrosion-resistant treatment) Dome cover: Polycarbonate resin, Clear (with ClearSight coating)
Other	Tamper-resistant enclosure *5

NOTES

*1 For information on the operation verification of the web browsers, refer to our support website <Control No.: C0132>.
*2 Transmission for 4 streams can be individually set.
*3 When recording audio on an SD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity) .
*4 When using with them, WV-QCA501A cable is required.
*5 Component that has a structure on which the screws that are accessible after installation cannot be screwed or unscrewed using an ordinary screwdriver.

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-QWL506S-W
4-screw Wall Mount Bracket (Salt resistant)

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-QWL501S-W
Wall Mount Bracket

WV-QSR506S-W
Mount Bracket

WV-QPL500S-W
Mount Bracket

WV-QCN500S-W
Mount Bracket

WV-QCL501S-W
Ceiling Mount Bracket

WV-QDC508G
Dome Cover

WV-QDC508C
Dome Cover

WV-QDC508CN
Dome Cover

WV-QCA501A
I/O Cable

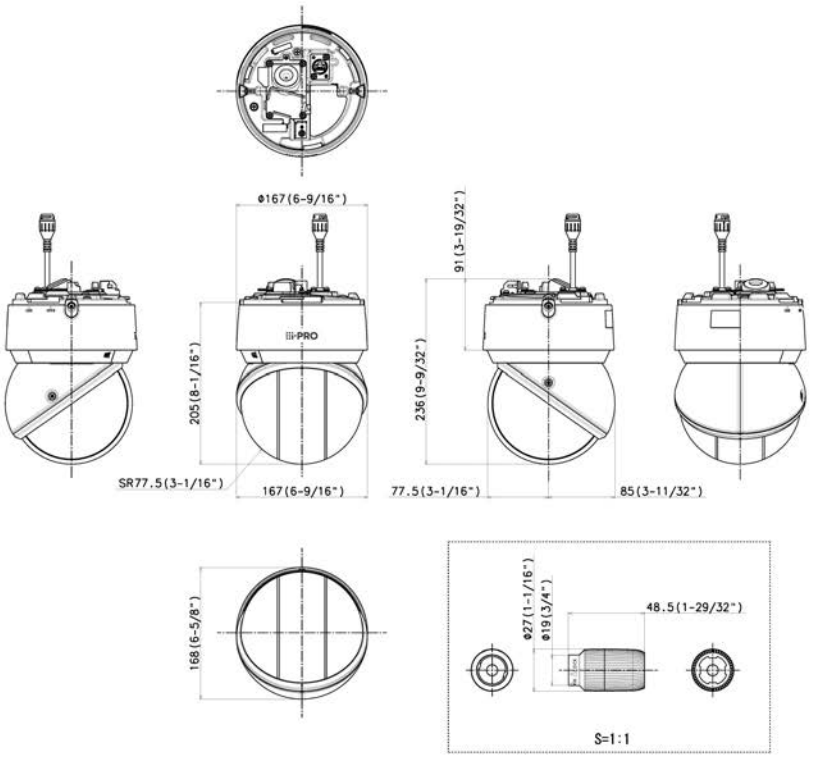
WV-PM500
Compact microphone unit

WJ-PU201P
PoE Injector

WJ-PU201/G
PoE Injector

APPEARANCE

耐重塩害モデル
Heavy salt damage version



	投影面積/Projected area
正面図/Front-view	0.029(m^2)
側面図/Side-view	0.029(m^2)

Mass : Approx. 3 kg (6.62 lbs)

Unit:mm