#### ::i·PRO

# WV-X66300-Z4S

2MP Outdoor 40x PTZ Network Camera with AI engine

#### **Rapid PTZ camera with AI engine**



- 2MP 40x PTZ camera
- Innovative New Form Factor PTZ
- Up to 2 Edge AI analytic apps
- Al auto tracking
- 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 Certified SecureElement (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

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) Color : 0.015 lx (50IRE, F1.6, 1/30s) BW : 0.006lx (50IRE, F1.6, 1/30s)		
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/Auto1(Normal)/Auto2(IR Light)/Auto3(SCC)		
IR LED Light	-		
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		
Al Analytics	Al Video Motion Detection, Al Face Detection, Al People Detection, Al Vehicle Detection, Al Non mask Detection, Al Occupancy Detection, Al 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)		
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, Preset: Up to approx. 700°/s		
Tilting Range	Operational -20° – +90°		
Tilting Speed	Manual: Approx. 0.065°/s –150°/s, Preset: Up to approx. 500°/s		
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		
Madavarada			
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	
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	
Alexen		
Alarm Alarm Source	3 terminals input,	
	VMD alarm, Command alarm, Audio detection alarm	
Alarm Actions	Command alarm,	
	Command alarm, Audio detection alarm SDXC/SDHC/SD memory recording, E-mail notification,	
Input/Output	Command alarm, Audio detection alarm SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, TCP alarm notification output	
	Command alarm, Audio detection alarm SDXC/SDHC/SD memory recording, E-mail notification,	
Input/Output Audio Input *4	Command alarm, Audio detection alarm SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, TCP alarm notification output 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	
Input/Output	Command alarm,         Audio detection alarm         SDXC/SDHC/SD memory recording, E-mail notification,         HTTP alarm notification Indication on browser, TCP alarm notification output         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 : Approx10 dBV         Ø3.5 mm stereo mini jack (monaural output)         Output impedance: Approx. 600Ω (unbalanced)	
Input/Output Audio Input *4 Audio Output *4	Command alarm,         Audio detection alarm         SDXC/SDHC/SD memory recording, E-mail notification,         HTTP alarm notification Indication on browser, TCP alarm notification output         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 : Approx10 dBV         Ø3.5 mm stereo mini jack (monaural output)         Output impedance: Approx. 600Ω (unbalanced)         Output level : -20 dBV         ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1)	
Input/Output Audio Input *4 Audio Output *4 External I/O Terminals *4	Command alarm,         Audio detection alarm         SDXC/SDHC/SD memory recording, E-mail notification,         HTTP alarm notification Indication on browser, TCP alarm notification output         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 : Approx10 dBV         Ø3.5 mm stereo mini jack (monaural output)         Output impedance: Approx. 600Ω (unbalanced)         Output level : -20 dBV         ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1)	
Input/Output Audio Input *4 Audio Output *4 External I/O Terminals *4 General	Command alarm,         Audio detection alarm         SDXC/SDHC/SD memory recording, E-mail notification,         HTTP alarm notification Indication on browser, TCP alarm notification output         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 : Approx10 dBV         Ø3.5 mm stereo mini jack (monaural output)         Output impedance : Approx. 600Ω (unbalanced)         Output impedance : Approx. 600Ω (unbalanced)         Output level : -20 dBV         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)	
Input/Output Audio Input *4 Audio Output *4 External I/O Terminals *4 General Safety	Command alarm,         Audio detection alarm         SDXC/SDHC/SD memory recording, E-mail notification,         HTTP alarm notification Indication on browser, TCP alarm notification output         #         #3.5 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 : Approx10 dBV         #3.5 mm stereo mini jack (monaural output)         Output impedance : Approx. 600Ω (unbalanced)         Output level : -20 dBV         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)         UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1	

Ambient Operating Temperature	-50 °C to $+60$ °C * ( $-58$ °F to $+140$ °F) (PoE++) (Power On range : $-30$ °C to $+60$ °C { $-22$ °F to $+140$ °F}) (TBD) * 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: $\phi$ 167mm × 205 mm (H) { $\phi$ 6-9/16 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		
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-QWL501S-W Wall Mount Bracket

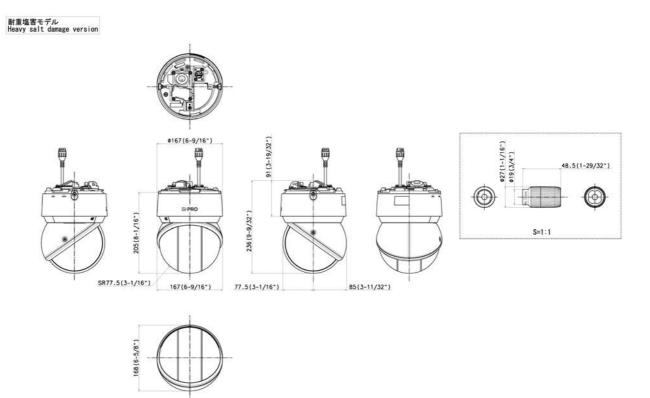
WV-QSR506S-W Mount Bracket

WV-QCL501S-W Ceiling Mount Bracket



WV-QCA501A I/O Cable

### **APPEARANCE**



	投影面積/Projected area	
正面図/Front-view 0.029(m <sup>2</sup> )		Unit:mm
側面図/Side-view	0.029(m <sup>2</sup> )	60
Mass : Approx. 3	kg [6.62  bs]	$\oplus \Box$