

## WV-S61301-Z2

2MP (1080p) 21x Indoor PTZ Network Camera

### S series PTZ camera with AI

S series models come standard with AI automatic tracking. It can automatically detect, zoom, and track intruders in a wide area, thereby supporting surveillance operators in many scenes. It also achieves the industry's highest level of drive durability to withstand high-speed and high-frequency camera movement by the automatic monitoring function.



- 2MP (1080p) 1920x1080
- 21x optical zoom
- Intelligent Auto (with Al Engine)
- Super Dynamic 144dB
- Color night vision (0.001 to 0.015 lx)
- Durable Pan/Tilt gear mechanism
- Built-in FIPS 140-2 Level 3 Certified Secure Element (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant













# **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: 0.015 lx (50IRE, F1.6, 1/30s) Color: 0.001 lx (50IRE, F1.6, 16/30s) BW: 0.006 lx (50IRE, F1.6, 1/30s) BW: 0.0004 lx (50IRE, F1.6, 16/30s)	
White Balance	ATW1 / ATW2 / AWC	
Shutter Speed	[60 fps Mode] 1/60 Fix to 1/10000 Fix, [30 fps/15 fps mode] 1/30 Fix to 1/10000 Fix [50 fps Mode] 1/50 Fix to 1/10000 Fix, [25 fps/12.5 fps mode] 1/25 Fix to 1/10000 Fix	
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)	
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 / Auto2 / Auto3 (SCC)	
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	
Al Sound Classification	Gunshot, Yell, Vehicle horn, Glass break	
Al Analytics	Al Video Motion Detection, Al Privacy Guard, 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)	
Focus Adjustment	Auto focus	

Lens		
Optical zoom	21x (Motorized zoom / Motorized Focus)	
Extra zoom	Max. 31x (21 to 31x : When resolution is 1280 x 720)	
Focal Length	4.0 - 84.6 mm {5/32 inches - 3-11/32 inches}	
Angular Field of View	[16 : 9 mode] Horizontal : 3.7° (TELE) – 77° (WIDE), Vertical : 2.2° (TELE) – 44° (WIDE) [4:3 mode] Horizontal : 2.8° (TELE) – 58° (WIDE), Vertical : 2.2° (TELE) – 44° (WIDE)	
Maximum Aperture Ratio	1:1.6 (WIDE) -1:4.5 (TELE)	
Focus Range	1.5 m {59-1/16 inches} − ∞	
DORI		
Detect (25ppm / 8ppf)	Wide: 51.9m / 170.3 ft, Tele: 1293.8 m / 4244.9 ft	
Observe (62.5ppm / 19ppf)	Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft	
Recognize (125ppm / 38ppf)	Wide: 10.4 m / 34.1 ft, Tele: 258.8 m / 849.0 ft	
Identify (250ppm / 76ppf)	Wide: 5.2m / 17.0 ft, Tele: 129.4 m / 424.5 ft	
System on Chip (SoC)		
System on Chip (SoC)	Ambarella CV25M	
Adjusting Angle		
Adjusting Angle  Adjusting Angle	Horizontal: 0 to +350°, Vertical: -30 to +90°, Yaw: 0°	
Pan/tilt	0 - +350°	
Panning Range	Manual: Approx. 0.065°/s – 150°/s	
Panning Speed	Preset: Up to approx. 500°/s	
Tilting Range	Operational -30° – +90°	
Tilting Speed	Manual: Approx. 0.065°/s -150°/s Preset: Up to approx. 350°/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	
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	10 Base-T / 100 Base-TX, RJ45 connector	
Resolution H.265/ H.264 JPEG (MJPEG)	[16:9 mode (60 fps mode)], [16:9 mode (30 fps mode)], [16:9 mode (50 fps mode)], [16:9 mode (50 fps mode)], [16:9 mode (25 fps 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	

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 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	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, SFTP, MQTT, LLDP 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, SFTP, MQTT, LLDP, NTCIP
No. of Simultaneous Users	Up to 14 users (Depends on network conditions)
Secure	FIPS 140-2 level 3 Certified Secure Element (NXP® EdgeLock® SE050F), Device Certificate GlobalSign® pre- installed, User authentication, Host authentication, HTTPS, 802.1X Support, Data encryption
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	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. $2$ k $\Omega$ (unbalanced) Supply voltage : $2.5$ V $\pm 0.5$ V
	For line input : Input level : Approx. –10 dBV
Audio Output	ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 $\Omega$ (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/ AUX OUT) (x1)
General	
Safety	UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1

FCC (Part15 ClassA), ICES-003 Issue 7 ClassA, EN55032 ClassA, EN55035

EMC

Power Source and Power Consumption	DC12 V, PoE (IEEE802.3af) DC12 V: 970 mA / Approx. 11.6 W PoE DC 48 V: 270 mA / Approx.12.95 W (Class Odevice)
Ambient Operating Temperature	-10 °C to +50 °C (+14 °F to +122 °F) (Power On range : 0 °C to +50 °C {+32 °F to +122 °F})
Ambient Operating Humidity	10 to 90 % (no condensation)
Anti-Condensation System	-
Dimensions	ø117 mm x 155 mm (H) {ø4-19/32 inches x 6-3/32 inches (H)}
Mass (Approx.)	Approx. 1.2 kg {2.65 lbs.}
Finish	Main body : Resin, i-PRO white

### **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-Q105A Mount Bracket



WV-QCL100-W Mount Bracket



WV-QCL101-W Mount Bracket



WV-QCN500-W Mount Bracket



WV-QED100C-W Ceiling Mount Bracket



WV-QED100G-W Ceiling Mount Bracket



WV-QJB500-W Mount Bracket



WV-QPL500-W Mount Bracket



WV-QWD100C-W Wall Mount Bracket



WV-QWD100G-W Wall Mount Bracket



WV-QWL500-W Mount Bracket



PACA4W Corner Mount Adapter Bracket



PAPM4W
Pole Mount Bracket



WV-QAT100 Inner Cover



WV-QCD100C-W Dome Cover



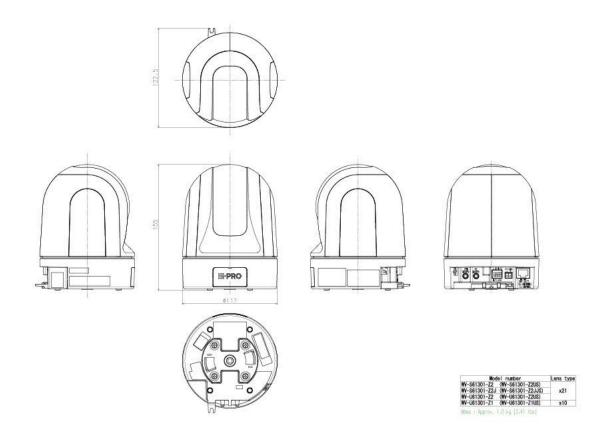
WV-QCD100G-W Dome Cover

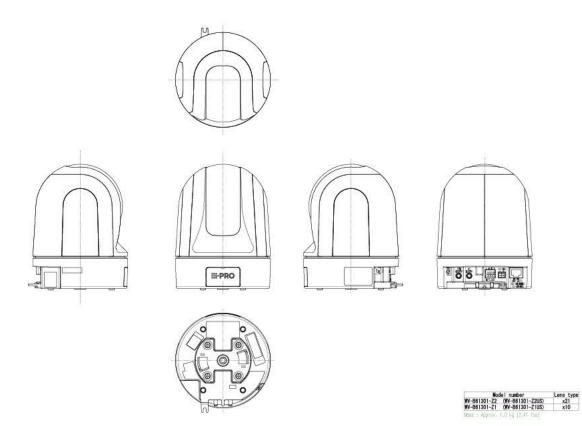


WV-PM500 Compact microphone unit for surveillance cameras



# **APPEARANCE**

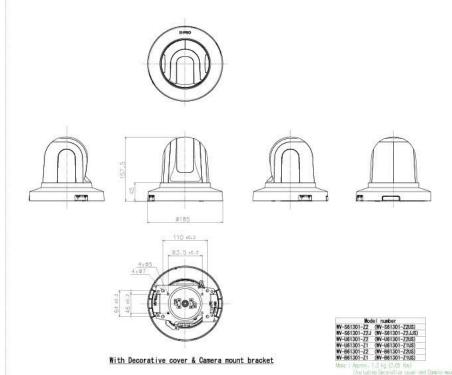






Inside of SD memory card cover S=2:1

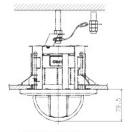




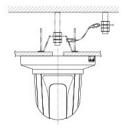
#### 金具との組み合わせ例 Example of combination with bracket



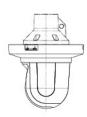
Attach to WV-QCD100C-W



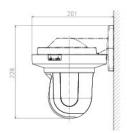
Attach to WV-QED100C-W



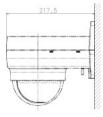
Attach to WV-QAT105A



Attach to WV-QCL100-W



Attach to WV-QWL500-W



Attach to WV-QWD100C-W

Model number		
WV-S61301-Z2	(MV-S61301-Z2US)	
WV-S61301-Z2J	(MV-S61301-Z2JJS)	
WV-U61301-Z2	(WV-U61301-Z2US)	
WV-U61301-Z1	(WV-U61301-Z1US)	
WV-B61301-Z2	(WV-B61301-Z2US)	
WV-B61301-Z1	(WV-B61301-Z1US)	