

WV-X66700-Z3S

4K Outdoor 30x PTZ Network Camera with AI engine

Rapid PTZ camera with AI engine



- 4K 30x PTZ camera
- Innovative New Form Factor PTZ
- Up to 3 Edge AI analytic apps
- AI 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

[Learn More](#)

SPECIFICATIONS

Camera	
Image Sensor	Approx. 1/2.8 type CMOS image sensor
Scanning Area	5.57 mm (H) x 3.13 mm (V) {7/32 inches (H) x 1/8 inches (V)}
Minimum Illumination	<p>Color :</p> <p>0.13 lx (30IRE, F1.8, 1/30s, AGC:11)* 0.19 lx (50IRE, F1.8, 1/30s, AGC:11) 0.012 lx (50IRE, F1.8, 16/30s, AGC:11)*</p> <p>BW :</p> <p>0.1 lx (50IRE, F1.8, 1/30s, AGC:11) 0.006 lx (50IRE, F1.8, 16/30s, AGC:11)*</p> <p>*Converted value</p>
White Balance	ATW1 / ATW2 / AWC
Shutter Speed	[30 fps mode] 1/30 Fix to 1/10000 Fix [25 fps mode] 1/25 Fix to 1/10000 Fix
Maximum shutter	[30 fps Mode] Max.1/4000s to Max.16/30s [25 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.132 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)
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	<p>AI Video Motion Detection, AI Privacy Guard, AI Face Detection, AI People Detection, AI Vehicle Detection, AI Non mask Detection (prior to V2.70), AI Occupancy Detection, AI Scene Change Detection</p> <p>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</p>
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)

Image Rotation	On / Off
Camera Title (OSD)	On / Off, Up to 40 characters (alphanumeric characters, marks)
Lens	
Optical zoom	30x (Motorized zoom / Motorized focus)
Extra zoom	Max. 90x (30x - 90x when resolution is 1280x720)
Digital (electronic) Zoom	90x - 480x
Focal length	4.5mm - 135mm (3/16 inches - 5-5/16 inches)
Angular Field of View	[16 : 9 mode] Horizontal : 2.5° (TELE) - 62° (WIDE), Vertical : 1.4° (TELE) - 37° (WIDE)
Maximum Aperture Ratio	1 : 1.8 (WIDE) - 1 : 4.7 (TELE)
Focus range	3.0 m {118-1/8 inches} -∞
Aperture range	F1.8 - close
DORI	
Detect (25ppm / 8ppf)	Wide: 127.8 m / 419.3 ft, Tele: 3519.7 m / 11547.6 ft
Observe (62.5ppm / 19ppf)	Wide: 51.1 m / 167.7 ft, Tele: 1407.9 m / 4619.0 ft
Recognize (125ppm / 38ppf)	Wide: 25.6 m / 83.9 ft, Tele: 703.9 m / 2309.5 ft
Identify (250ppm / 76ppf)	Wide: 12.8 m / 41.9 ft, Tele: 352.0 m / 1154.8 ft
System on Chip (SoC)	
System on Chip (SoC)	Ambarella CV22
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 range -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
Network	
Network IF	10Base-T / 100Base-TX, RJ45 connector
Resolution H.265 / H.264 / JPEG (MJPEG)	[16:9 mode (30 fps mode)] [16:9 mode (25 fps mode)] 3840x2160/ 2560x1440/ 1920x1080/ 1280x720/ 640x360/ 320x180

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 : 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), AndroidTM 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 (Audio output is monaural.) Output impedance: Approx. 600 Ω (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)
Monitor Outpu	-

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	PoE++ (IEEE802.3bt compliant) DC 54 V : 700 mA/Approx. 37.8 W (Class 6 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}) 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
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.

Trademarks and registered trademarks

- iPad and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries. - Android is a trademark of Google LLC.
- ONVIF is a trademark of ONVIF, Inc.

- All other trademarks identified herein are the property of their respective owners

OPTIONAL ACCESSORIES

Select a compatible accessory

[Accessory Selector \(i-pro.com\).](http://Accessory Selector (i-pro.com).)



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-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-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

