## WV-X66300-Z3S

2MP Outdoor 32x PTZ Network Camera with AI engine

## Rapid PTZ camera with Al engine

- 2MP 32x 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® SEO50F NXP® Semiconductors)

- NDAA Compliant

Precautions for heavy salt damage resistance

## SPECIFICATIONS

| Camera |  |
| :---: | :---: |
| Image Sensor | Approx. 1/2.8 type CMOS image sensor |
| Scanning Area | $\begin{aligned} & 5.57 \mathrm{~mm}(\mathrm{H}) \times 3.13 \mathrm{~mm}(\mathrm{~V}) \\ & \{7 / 32 \text { inches }(\mathrm{H}) \times 1 / 8 \text { inches }(\mathrm{V})\} \end{aligned}$ |
| Minimum Illumination | Color: 0.011 Ix (30IRE, F1.6, 1/30s) Color : 0.015 Ix (50IRE, F1.6, 1/30s) BW : 0.006Ix (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 | $60 \mathrm{fps} / 30 \mathrm{fps} / 15 \mathrm{fps}$ mode: Max. $1 / 4000 \mathrm{~s}$ to Max.16/30s $50 \mathrm{fps} / 25 \mathrm{fps} / 12.5 \mathrm{fps}$ mode: Max. $1 / 4000$ s to Max. $16 / 25 \mathrm{~s}$ |
| 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 <br> 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 |
| Al Sound Classification | Gunshot, Yell, Vehicle horn, Glass break |
| Al Analytics | Al Video Motion Detection, Al Face Detection, <br> AI People Detection, AI Vehicle Detection, <br> AI Non mask Detection, Al Occupancy Detection, AI Scene Change Detection <br> For details: <br> https://i-pro.com/products_and_solutions/en/surveillance/products/analytics-software <br> 3rd party applications are also available. <br> 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 | 32x (Motorized zoom / Motorized Focus) |
| Extra zoom | $\text { Max. } 48 \mathrm{x}$ <br> ( $32 x-48 x$ when resolution is $1280 \times 720$ ) |
| Focal length | $4.25-136 \mathrm{~mm}$ \{5/32 inches - 5-11/32 inches $\}$ |
| Angular Field of View | [16:9 mode] Horizontal : $2.4^{\circ}$ (TELE) $-65^{\circ}$ (WIDE), Vertical : $1.4^{\circ}$ (TELE) $-39^{\circ}$ (WIDE) (TBD) [ $4: 3$ mode] Horizontal : $1.9^{\circ}$ (TELE) $-51^{\circ}$ (WIDE), Vertical : $1.4^{\circ}$ (TELE) $-39^{\circ}$ (WIDE) (TBD) |
| Maximum Aperture Ratio | 1:1.6 (WIDE) - $1: 4.4$ (TELE) |
| Focus range | 3.0 m \{118-1/8 inches $\}-\infty$ |
| Aperture range | F1.6-close |
| DORI |  |
| Detect (25ppm / 8ppf) | Wide: 60.3 m / 197.8 ft , Tele: 1833.2 m / 6014.4 ft |
| Observe (62.5ppm / 19ppf) | Wide: $24.1 \mathrm{~m} / 79.1 \mathrm{ft}$, Tele: $733.3 \mathrm{~m} / 2405.8 \mathrm{ft}$ |
| Recognize (125ppm / 38ppf) | Wide: $12.1 \mathrm{~m} / 39.6 \mathrm{ft}$, Tele: $366.6 \mathrm{~m} / 1202.9 \mathrm{ft}$ |
| Identify (250ppm / 76ppf) | Wide: 6.0 m / 19.8 ft, Tele: 183.3 m / 601.4 ft |
| System on Chip (SoC) |  |
| System on Chip (SoC) | Ambarella CV25m |
| Adjusting Angle |  |
| Adjusting Angle | Horizontal : $360^{\circ}$ Endless Panning, TILT : $-20^{\circ}$ to $+90^{\circ}$, Yaw : $0^{\circ}$ |
| Pan /tilt |  |
| Panning Range | $360^{\circ}$ Endless Panning |
| Panning Speed | Manual: Approx. $0.065^{\circ} / \mathrm{s}-150^{\circ} / \mathrm{s}$, Preset: Up to approx. $700^{\circ} / \mathrm{s}$ |
| Tilting Range | Operational $-20^{\circ}-+90^{\circ}$ |
| Tilting Speed | Manual: Approx. $0.065^{\circ} / \mathrm{s}-150^{\circ} / \mathrm{s}$, Preset: Up to approx. $500^{\circ} / \mathrm{s}$ |
| Preset Positions | 256 positions |
| Auto Mode | Auto track/ Auto pan/ Preset sequence/ Patrol |
| Self Return | 10s/20 s/30 s/ $1 \mathrm{~min} / 2 \mathrm{~min} / 3 \mathrm{~min} / 5 \mathrm{~min} / 10 \mathrm{~min} / 20 \mathrm{~min} / 30 \mathrm{~min} / 60 \mathrm{~min}$ |
| 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)], <br> [16:9 mode (50fps mode)],[16:9 mode ( 25 fps mode)] <br> 1920x1080, 1280×720, 640×360, 320×180 <br> [4:3 mode (30 fps mode)], [4:3 mode ( 25 fps mode)] 1280x960, VGA, QVGA <br> [4:3 mode ( 15 fps mode)], [4:3 mode ( 12.5 fps mode)] 2048x1536*, 1280x960, VGA, QVGA <br> *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: <br> Off/ Low (Variable GOP 1s-8s)/ Mid (Variable GOP 4s-16s)/ <br> Advanced (Fixed GOP 60s w/1s key-frame)/ <br> Frame rate control (Variable GOP $4 \mathrm{~s}-16 \mathrm{~s}$ with frame rate control) <br> *Advanced and Frame rate control are only available with H. 265. <br> 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 : $64 \mathrm{kbps} / 96 \mathrm{kbps} / 128 \mathrm{kbps}$ |
| 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 <br> 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 ( $\mathrm{NXP} ®$ EdgeLock $®$ SEO5OF), Device Certificate GlobalSign ${ }^{\circledR}$ pre-installed, <br> 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 : <br> Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure JPEG recording : <br> Manual REC / Alarm REC (Pre/Post) / Backup upon network failure <br> Compatible SDXC/SDHC/SD Memory Card : <br> microSDXC memory card : $64 \mathrm{~GB}, 128 \mathrm{~GB}, 256 \mathrm{~GB}, 512 \mathrm{~GB}$ <br> microSDHC memory card : $4 \mathrm{~GB}, 8 \mathrm{~GB}, 16 \mathrm{~GB}, 32 \mathrm{~GB}$ <br> 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 | $\varnothing 3.5 \mathrm{~mm}$ stereo mini jack <br> Recommended applicable microphone: Plug-in power type <br> (Sensitivity of microphone:-51dB to $-38 \mathrm{~dB}(0 \mathrm{~dB}=1 \mathrm{~V} / \mathrm{Pa}, 1 \mathrm{kHz})$ ) <br> Input impedance: Approx. $2 \mathrm{k} \Omega$ (unbalanced) <br> Supply voltage: $4.0 \mathrm{~V} \pm 0.5 \mathrm{~V}$ <br> For line input : Input level : Approx. -10 dBV |
| Audio Output *4 | ø3.5 mm stereo mini jack (monaural output) <br> Output impedance : Approx. $600 \Omega$ (unbalanced) <br> 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 | ```PoE++ (IEEE802.3bt), PoE++ DC54V: 700mA/Approx.37.8W (Class 6 device)``` |


| Ambient Operating Temperature | $-50^{\circ} \mathrm{C} \text { to }+60^{\circ} \mathrm{C}^{*}\left(-58^{\circ} \mathrm{F} \text { to }+140^{\circ} \mathrm{F}\right)(\mathrm{PoE}++)$ <br> (Power On range : $-30^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}\left\{-22^{\circ} \mathrm{F}\right.$ to $\left.+140^{\circ} \mathrm{F}\right\}$ ) (TBD) <br> Maximum temperature according to NEMA TS $2(2.2 .7): 74^{\circ} \mathrm{C}\left(165^{\circ} \mathrm{F}\right)$ <br> * When using with the IR LED light constantly lit, the upper limit of the operating temperature range is $+50^{\circ} \mathrm{C}$ $\left\{+122^{\circ} \mathrm{F}\right\}$. |
| :---: | :---: |
| 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 $40 \mathrm{~m} / \mathrm{s}$ \{approx. 89 mph$\}$ |
| Dimensions | Maximum diameter: $\phi 167 \mathrm{~mm} \times 205 \mathrm{~mm}(\mathrm{H})\{\phi 6-9 / 16$ inches $\times 8-1 / 16$ inches $(H)\}$ Dome radius SR 77.5 mm \{SR 3-1/16 inches $\}$ <br> (excluding an attachment for the conduit portion and protruding parts) |
| Mass (approx.) | Approx. 3 kg (without attachment) |
| Finish | Main body : <br> 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
©i-PRO Co., Ltd All rights reserved / July 2023


## 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-PM500 Compact microphone unit for surveillance cameras


WV-SDB256G i-PRO SD Memory Card i-PRO SD Memory Card i-PRO SD Memory Card


V4co

WV-SDB032G
i-PRO SD Memory Card


WV-QCA501A I/O Cable

APPEARANCE

耐重権害モデル
Heavy salt damage version


