# WV-X25500-V3LN

5MP Outdoor Dome Network Camera with AI engine

## X-series dome camera with powerful cutting edge AI

- 5MP Outdoor Dome camera
- Up to 9 Edge AI analytic apps
- Compatible with AI On-site learning app
- Enables AI image analysis on non-AI cameras (with AI Processing Relay app)
- IP66, IP67, IK10 certified
- Built-in FIPS 140-2 Level 3 Certified SecureElement (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

Learn More

i-PRO

# SPECIFICATIONS

| Camera | |
|---|---|
| Image Sensor | Approx. 1/2.8 type CMOS image sensor |
| Scanning Area | 5.12 mm (H) × 3.84 mm (V) {3/16 inches (H) × 5/32 inches (V)} |
| Minimum Illumination | Color :<br>0.03 lx (30IRE, F1.3, 1/30s, AGC:11)*<br>0.04 lx (50IRE, F1.3, 1/30s, AGC:11)<br>0.003 lx (50IRE, F1.3, 16/30s, AGC:11)*<br><br>BW :<br>0 lx (50IRE, F1.3, 1/30s, AGC:11, IR LED: On)<br>0.02 lx (50IRE, F1.3, 1/30s, AGC:11)<br>0.002 lx (50IRE, F1.3, 16/30s, AGC:11)*<br>*Converted value |
| White Balance | ATW1/ ATW2/ AWC |
| Shutter Speed | [60 fps mode]<br>1/60 Fix to 1/10000 Fix<br>[30 fps/ 15 fps mode]<br>1/30 Fix to 1/10000 Fix<br>[50 fps mode]<br>1/50 Fix to 1/10000 Fix<br>[25 fps/ 12.5 fps mode]<br>1/25 Fix to 1/10000 Fix |
| Maximum Shutter | [60 fps mode]<br>Max. 1/4000 s to Max. 16/30 s<br>[30 fps/ 15 fps mode]<br>Max. 1/4000 s to Max. 16/30 s<br>[50 fps mode]<br>Max. 1/4000 s to Max. 16/25 s<br>[25 fps/ 12.5 fps mode]<br>Max. 1/4000 s to Max. 16/25 s |
| Intelligent Auto | On/Off |
| Super Dynamic | On/Off (Range : 0 to 31) |
| Dynamic Range | Max. 132 dB<br>(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 (Range : 0 to 31)<br>*only when Super Dynamic/ Intelligent Auto: Off |
| Fog Compensation | On/Off (Range : 0 to 8)<br>*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)/<br>Auto1(IR Light Off)/ Auto2(IR Light On)/ Auto3(SCC) |
| IR Illumination | High/ Middle/ Low/ Off<br>Maximum irradiation distance:<br>70 m {Approx. 230 ft} (30IRE)*<br>50 m {Approx. 164 ft} (50IRE)<br>* 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 area available |
| Audio Detection | On/ Off |
| AI Sound Classification | Selectable from Gunshot, Yell, Vehicle horn, Glass break |
| AI Anaytics | AI Video Motion Detection, AI Privacy Guard, AI Face Detection, AI People Detection, AI Vehicle Detection, AI Non mask Detection (prior to V3.30), AI Occupancy Detection, AI Scene Change Detection<br><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 8 zones available<br>Color: gray/white/blue/green/red/black, or mosaic |
| VIQS | On/Off, Up to 8 zones available |
| Image Rotation | 0° (Off)/ 90°/ 180° (Upside-down)/ 270° |
| Image Stabilizer | On/Off, Available only in the 30 fps mode |
| Camera Title (OSD) | On/Off<br>Up to 40 characters, Up to 2 lines (alphanumeric characters, marks) |

| **Lens** | |
|---|---|
| Optical Zoom | 3.1x (Motorized zoom / Motorized focus) |
| Extra Zoom | max 12.4x<br>(3.1x - 12.4x when resolution is 640x360) |
| Digital (electronic) Zoom | - |
| Focal Length | 2.9 mm – 9 mm<br>{1/8 inches – 11/32 inches} |
| Angular Field of View | [16:9 mode]<br>Horizontal： 33 ° (TELE) - 103 ° (WIDE)<br>Vertical： 19 ° (TELE) - 55° (WIDE)<br>[4:3 mode]<br>Horizontal： 33 ° (TELE) - 103 ° (WIDE)<br>Vertical： 25 ° (TELE) - 75° (WIDE) |
| Maximum Aperture Ratio | 1:1.3(WIDE) - 1:2.5(TELE) |
| Focus Range | 0.3 m {11-13/16 inches} - ∞ |
| Aperture Range | F1.3 - close |

| **DORI** | |
|---|---|
| Detect (25ppm / 8ppf) | 48.9m {160.3ft} (WIDE) 207.4m {680.5ft} (TELE) |
| Observe (62.5ppm / 19ppf) | 19.5m {64.1ft} (WIDE) 83.0m {272.2ft} (TELE) |
| Recognize (125ppm / 38ppf) | 9.8m {32.1ft} (WIDE) 41.5m {136.1ft} (TELE) |
| Identify (250ppm / 76ppf) | 4.9m {16.0ft} (WIDE) 20.7m {68.1ft} (TELE) |

| **System on Chip** | |
|---|---|
| System on Chip (SoC) | Ambarella CV52 |

| **Adjusting Angle** |
|---|

| | |
|---|---|
| Adjusting Angle (Fixed camera) | Horizontal (PAN) angle: -194°to +166°<br>Vertical (TILT) angle: -30°to +85°<br>Azimuth (YAW) angle: ±100° |

| **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 | [16:9 mode (60fps mode)] [16:9 mode (50fps mode)]<br>3072x1728*/ 2560x1440<br>[16:9 mode (30 fps mode)] [16:9 mode (25 fps mode)]<br>3072x1728*/ 2560x1440/ 1920x1080/ 1280x720/ 640x360/ 320x180<br>[4:3 mode (60 fps mode)] [4:3 mode (50 fps mode)]<br>3072x2304*/ 2560x1920<br>[4:3 mode (30 fps mode)] [4:3 mode (25 fps mode)]<br>3072x2304*/ 2560x1920/ 1280x960/ 800x600/ VGA/ 400x300/ QVGA<br><br>*Used by super resolution techniques. |
| H.265/H.264 Transmission Mode/Type *2 | [Transmission Mode]<br>Transmission priority:<br>Constant bit rate/ VBR/ Frame rate/ Best effort<br>[Transmission Type]<br>Unicast port (AUTO)/ Unicast port (MANUAL)/ Multicast |
| JPEG (MJPEG) Image Quality | 10 steps: 0(SUPER FINE) - 9(LOW) |
| Smart Coding | [GOP(Group of pictures) control]<br>Off/ Low (Variable GOP 1s-8s)/Mid (Variable GOP 4s-16s)/ Advanced (Fixed GOP 60 seconds with 1 second Key frame)/ Frame rate control (Variable GOP 4s-16s with frame rate control)<br>*Advanced and Frame rate control are only available with H.265.<br>[Smart VIQS]<br>On (High)/ On (Low)/ Off<br>[Smart P-picture control]<br>On/Off |
| Audio Compression Method *3 | G.726 (ADPCM): 16 kbps/ 32 kbps<br>G.711: 64 kbps<br>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, FTP, SFTP, LLDP, MQTT<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, FTP, SFTP, LLDP, MQTT |
| No. of Simultaneous Users | Up to 14 users (Depends on network conditions) |
| Secure | FIPS 140-2 level 3 (NXP® EdgeLock® SE050F),<br>Device Certificate GlobalSign® pre-installed, HTTPS,<br>User authentication, digest authentication, Host authentication,<br>IEEE802.1X, System log, Image transmission log, brute-force protection,<br>Alteration Detection, Secure boot, Signed firmware |
| SDXC/SDHC/SD Memory Card (Option) | microSDXC memory card: 64 GB, 128 GB, 256 GB, 512 GB<br>microSDHC memory card: 4 GB, 8 GB, 16 GB, 32 GB<br>microSD memory card: 2 GB |
| Mobile Terminal Compatibility | iPad / iPhone (iOS 8.0 or later), AndroidTM terminals |
| ONVIF®Profile | G / S / T / M |

| **Alarm** | |
|---|---|
| Alarm Source | 3 terninals input, VMD alarm, SCD alarm, Command alarm, Audio detection alarm |

| | |
|---|---|
| Alarm Actions | SDXC/SDHC/SD memory recording, E-mail notification,<br>HTTP alarm notification Indication on browser, TCP alarm notification output |

| Input/Output | |
|---|---|
| Audio Input *4 | ø3.5 mm stereo mini jack |
| Audio Output *4 | ø3.5 mm stereo mini jack (Audio output is monaural.)<br>Output impedance: Approx. 600 Ω (unbalanced)<br>Output level: –20 dBV |
| External I/O Terminals *4 | ALARM IN1<br>(Alarm input 1/ Black & white input/ Auto time adjustment input) (x1)<br>ALARM IN2 (Alarm input 2/ ALARM OUT) (x1)<br>ALARM IN3 (Alarm input 3/ AUX OUT) (x1) |
| Monitor Output | Yes (for adjustment)<br>Pin jack, NTSC or PAL signal can be output from camera |

| General | |
|---|---|
| Safety | UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1 |
| EMC | FCC (Part15 ClassA), ICES-003 ClassA, EN55032 ClassA, EN55035 |
| Power Source and Power Consumption | [Power Source]<br>DC12 V *4, PoE+ (IEEE802.3at compliant)<br>[Power Consumption]<br>DC12 V ：1.2 A／ Approx. 14.2 W<br>PoE+ DC 54 V ：260 mA／ Approx. 14.0 W（Class 4 device） |
| Ambient Operating Temperature | -40 °C to +55 °C {-40 °F to +131 °F}<br>(Power On range: -30 °C to +55 °C {-22 °F to +131 °F})<br><br>* 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/ IP67 (IEC 60529), Type 4X (UL50E), NEMA 4X compliant |
| Shock Resistance | 50J(IEC 60068-2-75 compliant), IK10(IEC62262) |
| Wind Resistance | Up to 40 m/s {approx. 89 mph} |
| Dimensions | ø154 mm × 105 mm (H) {ø6-1/16 inches ×4-1/8 inches (H)}<br>Dome radius 42 mm {1-21/32 inches}<br>(excluding an attachment for the conduit portion) |
| Mass (approx.) | Approx. 1.1 kg {2.43 lbs}<br>(excluding an attachment for the conduit portion) |
| Finish | Main body: Aluminum die cast, i-PRO white<br>Outer fixing screws:<br>Stainless steel (Corrosion-resistant treatment)<br>Dome cover:<br>PC resin, Clear(with ClearSight coating) |

# 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.

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 / January 2024

# OPTIONAL ACCESSORIES

Select a compatible accessory
[Accessory Selector (i-pro.com)]

WV-QWL501-W
Mount Bracket

WV-QWL500-W
Mount Bracket

WV-QSR501M1-W
Mount Bracket

WV-QSR501M-W
Mount Bracket

WV-QSR501F1-W
Mount Bracket

WV-QSR501F-W
Mount Bracket

WV-QSR501-W
Mount Bracket

WV-QSR500-W
Sun Shade

WV-QPL500-W
Mount Bracket

WV-QJB504-W
Base Bracket

WV-QJB501-W
Base Bracket

WV-QJB500-W
Mount Bracket

WV-QEM500-W
Mount Bracket

WV-QCN500-W
Mount Bracket

WV-QCL501-W
Mount Bracket

WV-QCL101-W
Mount Bracket

WV-QCL100-W
Mount Bracket

WV-Q105A
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-QCA500A
RJ45 Ethernet Cable

WV-QDC504C
Dome Cover

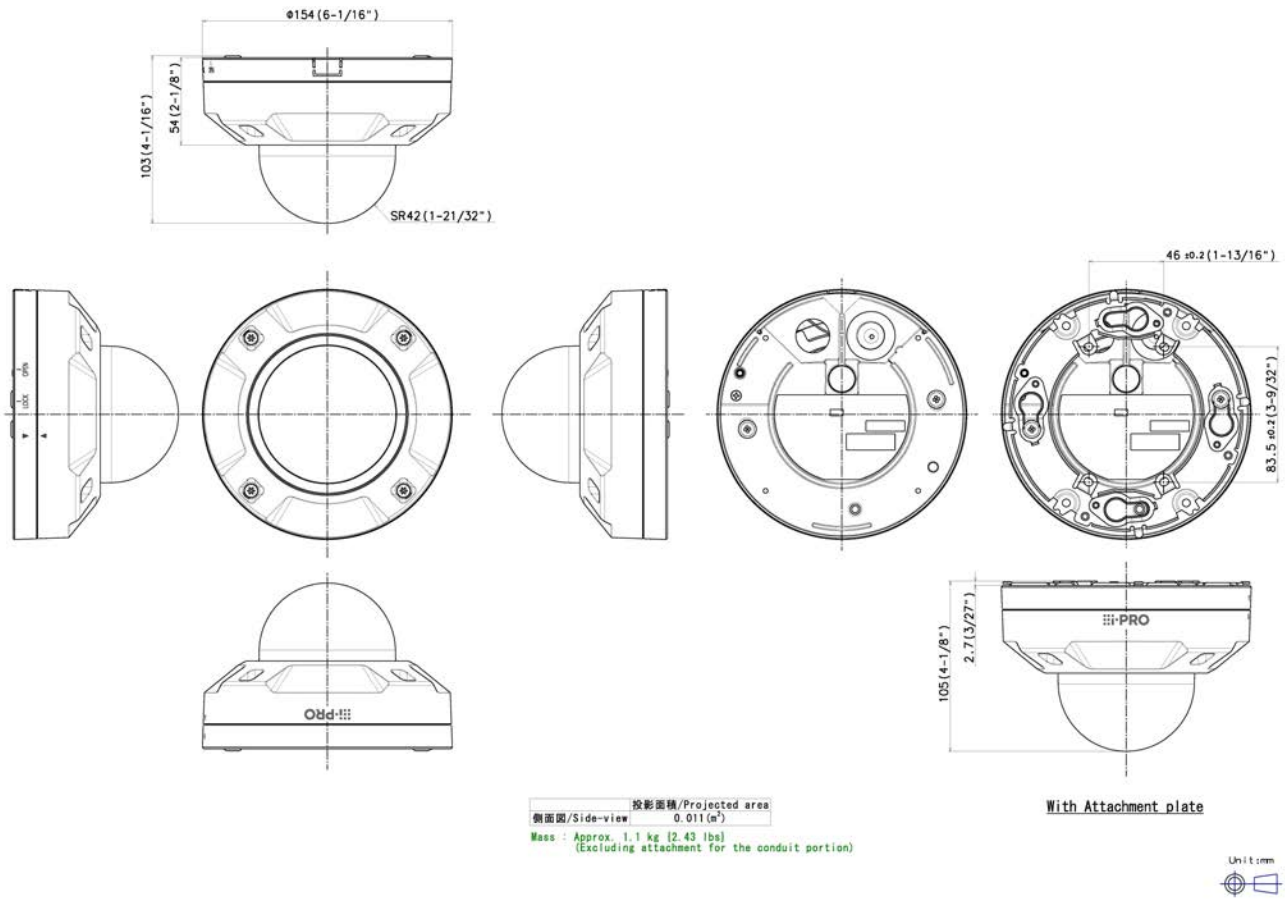
WV-CW7SN
Dome cover

WV-CW7S
Dome cover

WV-CW7CN
Dome cover

WV-PM500

# APPEARANCE


Φ154 (6-1/16")
54 (2-1/8")
103 (4-1/16")
SR42 (1-21/32")
46 ±0.2 (1-13/16")
83.5 ±0.2 (3-9/32")
105 (4-1/8")
2.7 (3/27")
i-PRO
投影面積/Projected area
側面図/Side-view
0.011 (m²)
Mass : Approx. 1.1 kg (2.43 lbs)
(Excluding attachment for the conduit portion)
With Attachment plate
Unit:mm