

WV-X22500-V3L

5MP Indoor Dome Network Camera with AI engine

X-series dome camera with powerful cutting edge AI



- 5MP Indoor 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)
- IK10 certified
- Built-in FIPS 140-2 Level 3 Certified SecureElement (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

[Learn More](#)

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 : 0.03 lx (30IRE, F1.3, 1/30s) Color : 0.04 lx (50IRE, F1.3, 1/30s) BW : 0.02 lx (50IRE, F1.3, 1/30s) BW : 0 lx (50IRE, F1.3, 1/30s with IR LED) |
| 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 |
| Maximum Shutter | [60 fps mode] Max. 1/4000 s to Max. 16/30 s [30 fps/ 15 fps mode] Max. 1/4000 s to Max. 16/30 s [50 fps mode] Max. 1/4000 s to Max. 16/25 s [25 fps/ 12.5 fps mode] 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 (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) *only when Super Dynamic/ Intelligent Auto: Off |
| Fog Compensation | On/Off (Range : 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) |
| IR Illumination | High/ Middle/ Low/ Off Maximum irradiation distance: 70 m {Approx. 230 ft} (30IRE)* 50 m {Approx. 164 ft} (50IRE) * 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 Analytics | AI Video Motion Detection, AI Privacy Guard, AI Face Detection, AI People Detection, AI Vehicle Detection, AI Non mask Detection, AI Occupancy Detection, AI Scene Change Detection, AI On-site Learning, AI Processing Relay 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 8 zones available 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 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 (3.1x - 12.4x when resolution is 640x360) |
| Digital (electronic) Zoom | - |
| Focal Length | 2.9 mm – 9 mm {1/8 inches – 11/32 inches} |
| Angular Field of View | [16:9 mode] Horizontal : 33° (TELE) - 105° (WIDE) Vertical : 19° (TELE) - 56° (WIDE) [4:3 mode] Horizontal : 33° (TELE) - 105° (WIDE) Vertical : 25° (TELE) - 76° (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) | 47.1m {154.7ft} (WIDE) 207.4m {680.5ft} (TELE) |
| Observe (62.5ppm / 19ppf) | 18.9m {61.9ft} (WIDE) 83.0m {272.2ft} (TELE) |
| Recognize (125ppm / 38ppf) | 9.4m {30.9ft} (WIDE) 41.5m {136.1ft} (TELE) |
| Identify (250ppm / 76ppf) | 4.7m {15.5ft} (WIDE) 20.7m {68.1ft} (TELE) |

System on Chip

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

Adjusting Angle

| | |
|--------------------------------|---|
| Adjusting Angle (Fixed camera) | Horizontal (PAN) angle: -240°to +120° Vertical (TILT) angle: -30°to +85° 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)] 3072x1728* / 2560x1440 [16:9 mode (30 fps mode)] [16:9 mode (25 fps mode)] 3072x1728* / 2560x1440 / 1920x1080 / 1280x720 / 640x360 / 320x180 [4:3 mode (60 fps mode)] [4:3 mode (50 fps mode)] 3072x2304* / 2560x1920 [4:3 mode (30 fps mode)] [4:3 mode (25 fps mode)] 3072x2304* / 2560x1920 / 1280x960 / 800x600 / VGA / 400x300 / QVGA *Used by super resolution techniques. |
| H.265/H.264 Transmission Mode/Type *2 | [Transmission Mode] Transmission priority: Constant bit rate / VBR / Frame rate / Best effort [Transmission Type] 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] 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) *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, FTP, SFTP, LLDP, MQTT 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), Device Certificate GlobalSign® pre-installed, HTTPS, User authentication, digest authentication, Host authentication, IEEE802.1X, System log, Image transmission log, brute-force protection, Alteration Detection, Secure boot, Signed firmware |
| SDXC/SDHC/SD Memory Card (Option) | 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 / S / T / M |

Alarm

| | |
|---------------|---|
| Alarm Source | 3 terminals input, VMD alarm, SCD 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 |
| 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 IN1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN2 (Alarm input 2/ ALARM OUT) (x1) ALARM IN3 (Alarm input 3/ AUX OUT) (x1) |
| Monitor Output | Yes (for adjustment) 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] DC12 V *4, PoE+ (IEEE802.3at compliant) [Power Consumption] DC12 V : 1.2 A / Approx. 14.2 W PoE+ DC 54 V : 260 mA / Approx. 14.0 W (Class 4 device) |
| 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) |
| Shock Resistance | IK10(IEC 62262) |
| Dimensions | ø129.5 mm × 102.5 mm (H) {ø5-3/32 inches × 4-1/32 inches (H)} Dome radius 41.5 mm {1-5/8 inches} |
| Mass (approx.) | Approx. 820 g {1.9 lbs} |
| Finish | Main body: Aluminum die cast, i-PRO white Dome cover: PC resin, Clear |

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) .

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 \(i-pro.com\)](http://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-QSR100-W
Sun Shade



WV-QPL500-W
Mount Bracket



WV-QJB500-W
Mount Bracket



WV-QEM100-W
Mount Bracket



WV-QCN500-W
Mount Bracket



WV-QCL501-W
Mount Bracket



WV-QCL101-W
Mount Bracket



WV-QCL100-W
Mount Bracket



WV-QAT501-W
Attachment Pipe
Bracket



WV-QAT500-W
Attachment pipe



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-QDC200C
Dome Cover

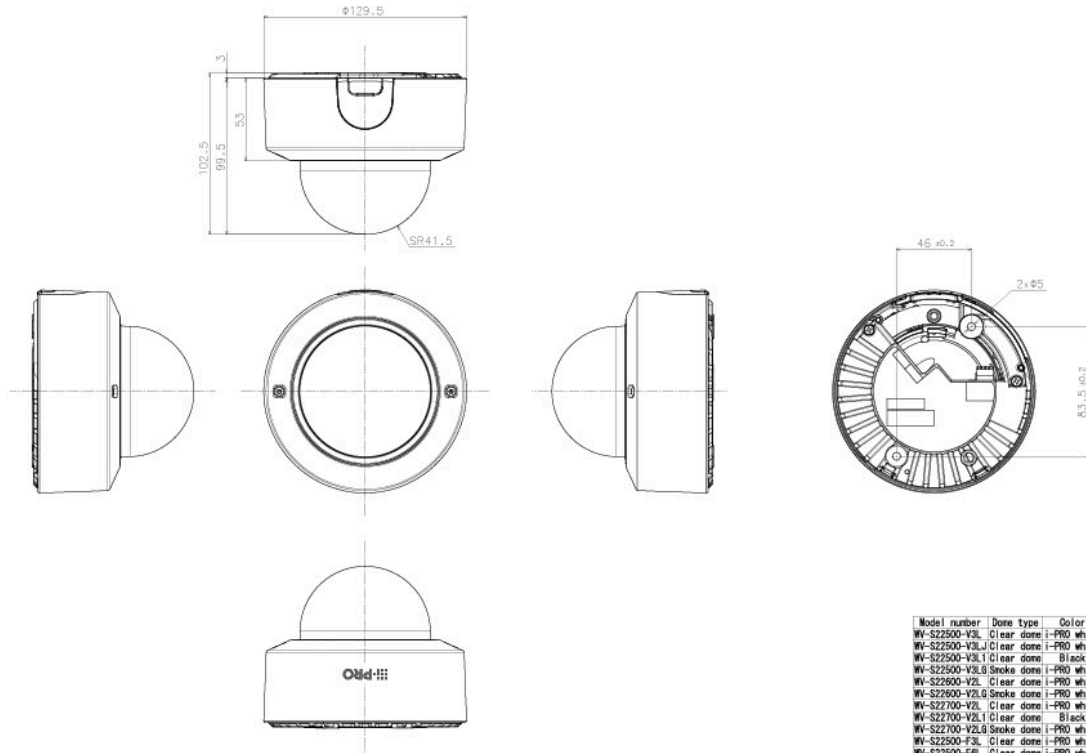


WV-CR1S
Dome Cover



WV-PM500
Compact microphone
unit for surveillance
cameras

APPEARANCE



| Model number | Door type | Color | Lower cover coating |
|----------------|------------|-------------|---------------------|
| WV-S22500-V2L | Clear dome | i-PRO white | No |
| WV-S22500-V2LJ | Clear dome | i-PRO white | No |
| WV-S22500-V2L1 | Clear dome | Black | Black |
| WV-S22500-V2L6 | Smoke dome | i-PRO white | No |
| WV-S22600-V2L | Clear dome | i-PRO white | No |
| WV-S22600-V2L6 | Smoke dome | i-PRO white | No |
| WV-S22700-V2L | Clear dome | i-PRO white | No |
| WV-S22700-V2L1 | Clear dome | Black | Black |
| WV-S22700-V2L6 | Smoke dome | i-PRO white | No |
| WV-S22500-F5L | Clear dome | i-PRO white | No |
| WV-S22500-F6L | Clear dome | i-PRO white | No |

Mass : Approx. 800 g (1,77 lbs)