

# WV-S22700-V2L

4K Vandal Resistant Indoor Dome Network Camera

## S-series High resolution Network camera with AI engine

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- 4K
- Intelligent Auto (with AI Engine)
- Super Dynamic 132dB
- Color night vision (0.04 to 0.06 lx)
- Smart Coding (with AI Engine)
- Built-in IR LED
- Vandal Resistant
- Built-in FIPS 140-2 Level 3 Compliant Secure Element  
(EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

# SPECIFICATIONS

| Camera  |   |
|---|---|
| Image Sensor                                    | Approx. 1/1.8 type CMOS image sensor  |
| Scanning Area                                   | 7.68 mm (H)×4.32 mm (V)<br>{5/16 inches (H) × 5/32 inches (V)}  |
| Minimum Illumination                            | Color :<br>0.04 lx (30IRE, F1.5, 1/30s, AGC:11)*<br>0.06 lx (50IRE, F1.5, 1/30s, AGC:11)<br>0.004 lx (50IRE, F1.5, 16/30s, AGC:11)*<br><br>BW :<br>0 lx (50IRE, F1.5, 1/30s, AGC:11, IR LED: On)<br>0.03 lx (50IRE, F1.5, 1/30s, AGC:11)<br>0.002 lx (50IRE, F1.5, 16/30s, AGC:11)*<br>*Converted value   |
| White Balance                                   | ATW1/ ATW2/ AWC   |
| Shutter Speed                                   | [30fps/15fps mode] 1/30 Fix to 1/10000 Fix<br>[25fps/12.5fps mode] 1/25 Fix to 1/10000 Fix  |
| Maximum Shutter                                 | [30 fps mode] Max. 1/4000 s to Max. 16/30 s<br>[25 fps mode] Max. 1/4000 s to Max. 16/25 s  |
| 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<br>(only when Super dynamic / Intelligent Auto : Off)   |
| Fog Compensation                                | On / Off (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 LED Light                                    | High / Middle / Low / Off,<br>Maximum irradiation distance : 50 m {Approx. 164 ft} (30IRE)<br>35 m {Approx. 115 ft} (50IRE)   |
| 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                                    | AI Video Motion Detection, AI Privacy Guard, AI Face Detection,<br>AI People Detection, AI Vehicle Detection, AI Non mask Detection (prior to V2.70), AI Occupancy<br>Detection, AI Scene Change Detection<br><br>For details :<br><a href="https://i-pro.com/products_and_solutions/en/surveillance/products/analytics-software">https://i-pro.com/products_and_solutions/en/surveillance/products/analytics-software</a><br>3rd party applications are also available.<br><a href="https://i-pro.com/products_and_solutions/en/surveillance/solutions/edge-ai-platform/application-list">https://i-pro.com/products_and_solutions/en/surveillance/solutions/edge-ai-platform/application-list</a> |
| Privacy Zone                                    | On / Off, Up to 8 zones available   |

|                    |  |
|--------------------|--|
| VIQS               | On / Off, Up to 8 zones available                              |
| Image Rotation     | 0 ° / 90 ° / 180 ° / 270 °                                     |
| Camera Title (OSD) | On / Off, Up to 40 characters (alphanumeric characters, marks) |
| Focus Adjustment   | Auto focus   |

### Lens

|                        |  |
|------------------------|--|
| Optical zoom           | 2.0x (Motorized zoom / Motorized Focus)  |
| Extra zoom             | 2.0x -6.0x (when resolution is 1280 x 720)   |
| Focal length           | 4.3 - 8.6 mm {5/32 inches - 11/32 inches}  |
| Angular Field of View  | [16 : 9 mode] *[4:3 mode] is not supported.<br>Horizontal : 52° (TELE) – 101° (WIDE)<br>Vertical : 29° (TELE) – 55° (WIDE) |
| Maximum Aperture Ratio | 1 : 1.5 (WIDE) – 1 : 2.4 (TELE)  |
| Focus range            | 1.0 m {39-3/8 inches} – ∞  |

### DORI

|                            |  |
|----------------------------|--|
| Detect (25ppm / 8ppf)      | Wide: 63.3m / 207.7 ft, Tele: 157.5 m / 516.6 ft |
| Observe (62.5ppm / 19ppf)  | Wide: 25.3 m / 83.1 ft, Tele: 63.0 m / 206.6 ft  |
| Recognize (125ppm / 38ppf) | Wide: 12.7 m / 41.5 ft, Tele: 31.5 m / 103.3 ft  |
| Identify (250ppm / 76ppf)  | Wide: 6.3m / 20.8 ft, Tele: 15.7 m / 51.7 ft     |

### System on Chip (SoC)

|                      |                |
|----------------------|----------------|
| System on Chip (SoC) | Ambarella CV22 |
|----------------------|----------------|

### Adjusting Angle

|                 |   |
|-----------------|---|
| Adjusting Angle | Horizontal : -240 to +120°, Vertical : -30 to +85°, Yaw : ±100° |
|-----------------|---|

### Browser GUI

|                           |  |
|---------------------------|--|
| Camera Control            | Brightness, AUX On / Off   |
| Audio                     | Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High<br>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                            | 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)]<br>3840x2160/2560x1440/1920x1080/1280x720/640x360/320x180   |
| H.265/H.264                           | [Transmission Mode]<br>Constant bit rate / VBR / Frame rate / Best effort<br>[Transmission Type]<br>Unicast port (AUTO) / Unicast port (MANUAL) / Multicast  |
| JPEG                                  | [Image Quality]<br>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 4s-16s 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             | 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) /<br>Interactive (Full duplex)  |
| Supported Protocol            | IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, SMTP, DNS, NTP, SNMPv1/v2/v3,<br>DHCPv6, RTP, MLD, ICMP, ARP, IEEE 802.1X, DiffServ, SFTP, MQTT, LLDP<br>IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP,<br>SMTP, DHCP, DNS, DDNS, NTP, SNMPv1/v2/v3, UPnP, IGMP,<br>ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, SFTP, MQTT, LLDP  |
| 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,<br>HTTPS, User authentication, Digest authentication, Host authentication,<br>IEEE802.1X, System log, Image transmission log, Brute-force protection, Alteration detection, Signed<br>Firmware  |
| SDXC/SDHC/SD Memory Card      | H.265 / H.264 recording :<br>Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure<br>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 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), 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,<br>HTTP alarm notification Indication on browser,<br>TCP alarm notification output |

## Input/Output

|                        |   |
|------------------------|---|
| Audio input            | ø3.5 mm stereo mini jack<br><br>For microphone input : Recommended applicable microphone : Plug-in power type<br>(Sensitivity of microphone : -51 dB to -38 dB (0 dB=1 V/Pa, 1 kHz))<br>Input impedance : Approx. 2 kΩ (unbalanced)<br>Supply voltage : 2.5 V ±0.5 V<br><br>For line input : Input level: Approx. -10 dBV |
| Audio Output           | ø3.5 mm stereo mini jack (monaural output)<br>Output impedance : Approx. 600 Ω (unbalanced)<br>Output level : -20 dBV   |
| External I/O Terminals | ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1)<br>ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1)<br>ALARM IN 3 (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,<br>EN55032 ClassA, EN55035  |
| Power Source and Power Consumption | DC power supply : DC12 V 1.0 A, Approx. 12.0 W<br>PoE (IEEE802.3af compliant) Device : DC48 V 240 mA, Approx. 11.5 W (Class 0 device) |
| Ambient Operating Temperature      | -10 °C to +50 °C (14 °F to 122 °F)<br>(Power On range: 0 °C to 50 °C {32°F to 122 °F})  |
| Shock Resistance                   | IK10 (IEC 62262)  |

|                            |   |
|----------------------------|---|
| Ambient Operating Humidity | 10 to 90 %<br>(no condensation)   |
| Dimensions                 | ø129.5 mm x 102.5 mm (H) {ø5-3/32 inches x 4-1/32 inches (H)}<br>Dome radius 41.5 mm {1-5/8 inches} |
| Mass (approx.)             | 800 g {1.77 lbs.}   |
| Finish                     | Main body : Aluminum die cast, i-PRO white<br>Dome cover : Polycarbonate resin, Clear               |

## 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 \(i-pro.com\)](http://i-pro.com)



WV-QWL500-W  
Mount Bracket



WV-QSR501-W  
Mount Bracket



WV-QPL500-W  
Mount Bracket



WV-QJB500-W  
Mount Bracket



WV-QCN500-W  
Mount Bracket



WV-QCL101-W  
Mount Bracket



WV-QCL100-W  
Mount Bracket



WV-QEM100-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-QDC200C  
Dome Cover

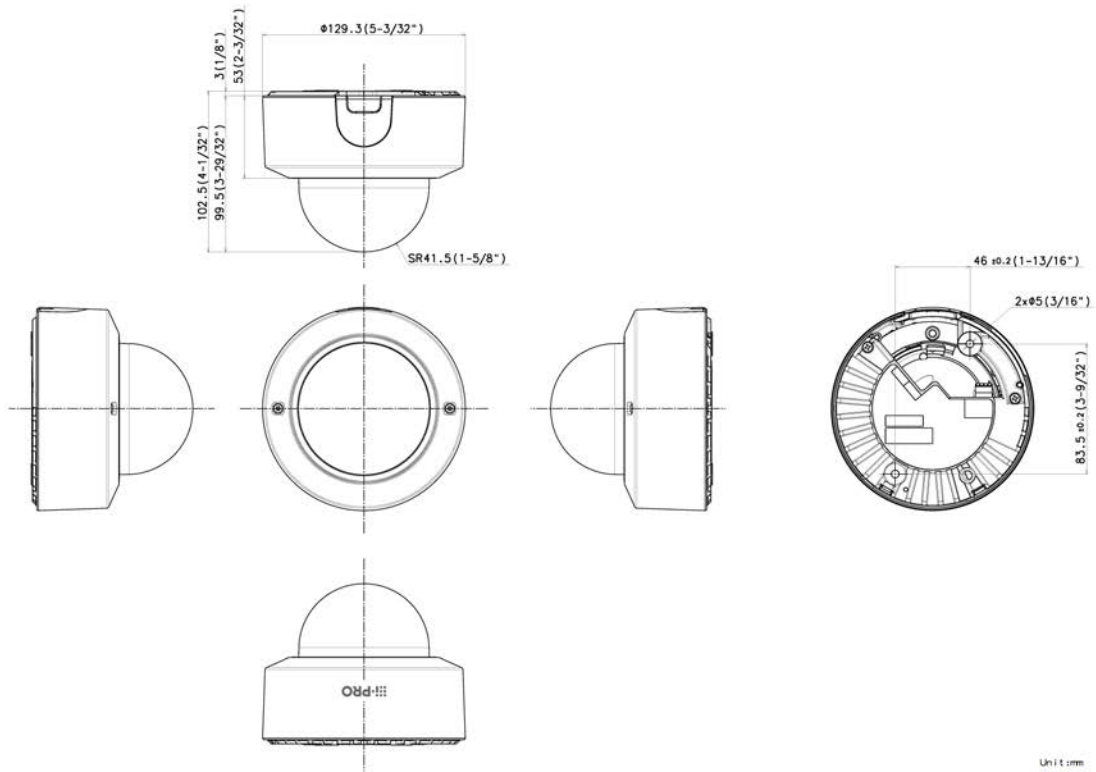


WV-PM500  
Compact microphone  
unit



WV-CR1S  
Dome Cover

## APPEARANCE



Mass : Approx. 800 g [1.77 lbs]

Unit : mm