

# WV-S22700-V2L1

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 Certified 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) {5/16 inches (H) × 5/32 inches (V)}
Minimum Illumination	Color : 0.04 lx (30IRE, F1.5, 1/30s, AGC:11)* 0.06 lx (50IRE, F1.5, 1/30s, AGC:11) 0.004 lx (50IRE, F1.5, 16/30s, AGC:11)*  BW : 0 lx (50IRE, F1.5, 1/30s, AGC:11, IR LED: On) 0.03 lx (50IRE, F1.5, 1/30s, AGC:11) 0.002 lx (50IRE, F1.5, 16/30s, AGC:11)* *Converted value
White Balance	ATW1/ ATW2/ AWC
Shutter Speed	[30fps/15fps mode] 1/30 Fix to 1/10000 Fix [25fps/12.5fps mode] 1/25 Fix to 1/10000 Fix
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 (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, Maximum irradiation distance : 50 m {Approx. 164 ft} (30IRE) , 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, AI People Detection, AI Vehicle Detection, AI Non mask Detection (prior to V2.70), AI Occupancy Detection, AI Scene Change Detection  For details : <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> 3rd party applications are also available. <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. Horizontal : 52° (TELE) – 101° (WIDE) , 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
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## Adjusting Angle

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

Camera Control	Brightness, AUX On / Off
Audio	Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High 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)] 3840x2160/2560x1440/1920x1080/1280x720/640x360/320x180
H.265/H.264	[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	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, SFTP, MQTT, LLDP IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP, DHCP, DNS, DDNS, NTP, NMPv1/v2/v3, UPnP, IGMP, 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, 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	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), 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, HTTP alarm notification Indication on browser, TCP alarm notification output

Input/Output	
Audio input	ø3.5 mm stereo mini jack For microphone input : Recommended applicable microphone : Plug-in power type (Sensitivity of microphone : -51 dB to -38 dB (0 dB=1 V/Pa, 1 kHz)) Input impedance : Approx. 2 kΩ (unbalanced) Supply voltage : 2.5 V ±0.5 V For line input : Input level: Approx. -10 dBV
Audio Output	ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 Ω (unbalanced) , Output level : -20 dBV
External I/O Terminals	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 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	DC power supply : DC12 V 1.0 A, Approx. 12.0 W 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) (Power On range: 0 °C to 50 °C {32°F to 122 °F})
Shock Resistance	IK10 (IEC 62262)
Ambient Operating Humidity	10 to 90 % (no condensation)
Dimensions	ø129.5 mm x 102.5 mm (H) {ø5-3/32 inches x 4-1/32 inches (H)} Dome radius 41.5 mm {1-5/8 inches}
Mass (approx.)	800 g {1.77 lbs.}
Finish	Main body : Aluminum die cast, Black 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-QWL501-B  
Mount Bracket



WV-QWL500-B  
Mount Bracket



WV-QSR501-B  
Mount Bracket



WV-QPL500-B  
Mount Bracket



WV-QJB500-B  
Mount Bracket



WV-QEM100-B  
Mount Bracket



WV-QCL100-B  
Mount Bracket



WV-Q183  
Mount Bracket



WV-Q178  
Mount Bracket



WV-Q105A  
Mount Bracket

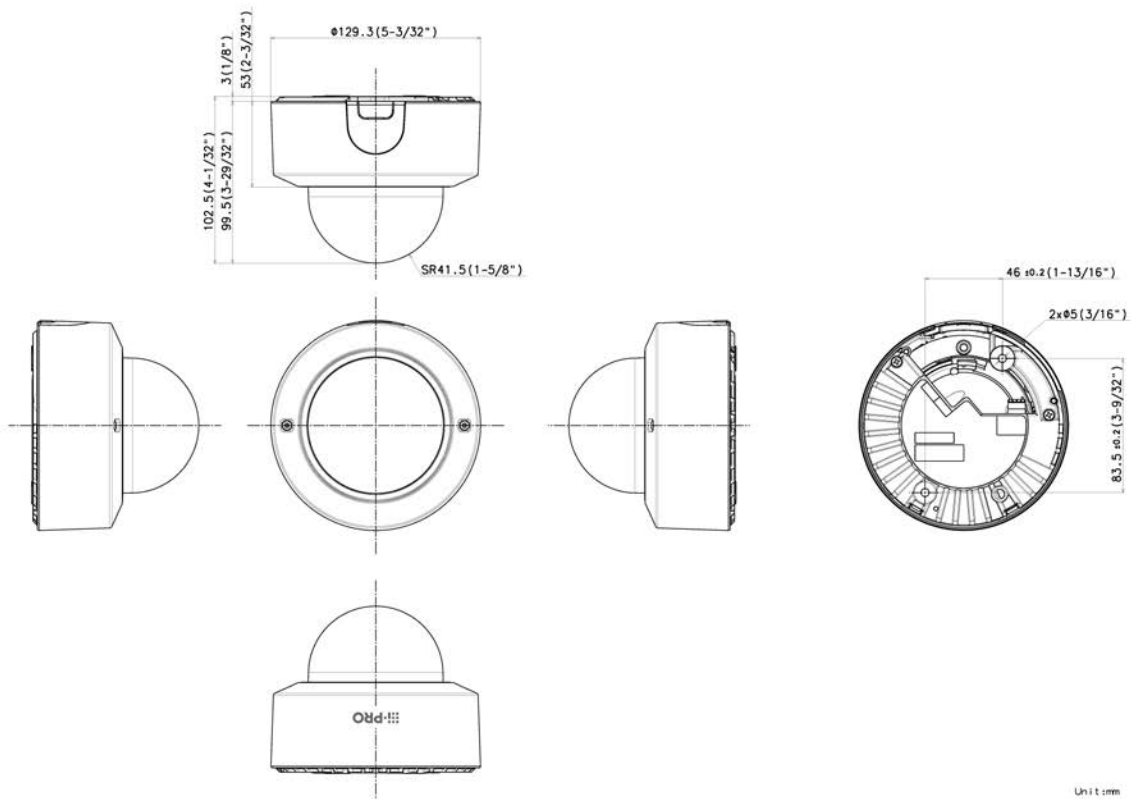


WV-CF5SA  
Dome Cover



WV-PM500  
Compact microphone  
unit for surveillance  
cameras

## APPEARANCE



Mass : Approx. 800 g (1.77 lbs)

Unit : mm