WV-X22300A-V3L

2MP AI Indoor Vandal IR Dome Camera (3.1x zoom)

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- 2MP Indoor Vandal 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 140-3 Level 3, CC EAL6+ Compliant Secure Element (NXP® EdgeLock® SE052F)
- NDAA Compliant

SPECIFICATIONS

Camera	
Image Sensor	Approx. 1/2.8 type CMOS image sensor
Scanning Area	5.57 mm (H) × 3.13 mm (V) {7/32 inches (H) × 1/8 inches (V)}
Minimum Illumination	Color : 0.007 lx (30IRE, F1.3, 1/30s, AGC:11)* 0.009 lx (50IRE, F1.3, 1/30s, AGC:11) 0.0006 lx (50IRE, F1.3, 16/30s, AGC:11)* BW : 0 lx (50IRE, F1.3, 1/30s, AGC:11, IR LED: On) 0.005 lx (50IRE, F1.3, 1/30s, AGC:11) 0.0004 lx (50IRE, F1.3, 16/30s, AGC:11)* *Converted value
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. 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 (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 (prior to V3.30), 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
Max. Number of Applications	9
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 (Built-in gyro sensor) 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 9.3x (3.1x - 9.3x when resolution is 640x360)
Focal Length	2.9 mm – 9 mm {1/8 inches – 11/32 inches}
Angular Field of View	[16:9 mode] Horizontal： 36 ° (TELE) - 114 ° (WIDE) Vertical： 20 ° (TELE) - 60° (WIDE) [4:3 mode] Horizontal： 27 ° (TELE) - 82 ° (WIDE) Vertical： 20 ° (TELE) - 60° (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)	24.9m {81.8ft} (WIDE) 118.2m {387.7ft} (TELE)
Observe (62.5ppm / 19ppf)	10.0m {32.7ft} (WIDE) 47.3m {155.1ft} (TELE)
Recognize (125ppm / 38ppf)	5.0m {16.4ft} (WIDE) 23.6m {77.5ft} (TELE)
Identify (250ppm / 76ppf)	2.5m {8.2ft} (WIDE) 11.8m {38.8ft} (TELE)

System on Chip	
System on Chip (SoC)	Ambarella CV52

Adjusting Angle	
Adjusting Angle	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 (60 fps mode)] [16:9 mode (50 fps mode)] 1920x1080/ 1280x720/ 640x360/ 320x180 [16:9 mode (30 fps mode)][16:9 mode (25 fps mode)] 1920x1080/ 1280x720/ 640x360/ 320x180 [4:3 mode (60 fps mode)][4:3 mode (50 fps mode)] 2048x1536※/ 1280x960/ VGA/ QVGA [4:3 mode (30 fps mode)][4:3 mode (25 fps mode)] 2048x1536※/ 1280x960/ VGA/ QVGA
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)/ Frame rate control (Variable GOP 4s-16s with frame rate control) *Frame rate control is 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 140-3 level 3, CC EAL6+ (NXP® EdgeLock® SE052F), 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), AndroidTM terminals
ONVIF®Profile	G / M / S / T

Alarm	
Alarm Source	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	ø3.5 mm stereo mini jack

Audio Output	ø3.5 mm stereo mini jack (Audio output is monaural.) Output impedance: Approx. 600 Ω (unbalanced) Output level: –20 dBV
External I/O Terminals	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 Issue 7 ClassA, EN55032 ClassA, EN55035
Power Source/Power Consumption	[Power Source] DC12 V, 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)
Storage Temperature & Humidity	Storage temperature: -30 °C to +60 °C {-22 °F to +140 °F} Storage humidity: 10 % to 95 % (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.
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OPTIONAL ACCESSORIES

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

WV-QWL506-W
4-screw Wall Mount Bracket

WV-QWL506M1-W
ANSI Male Wall Mount Bracket (1.5”NPT)

WV-QWL500-W
Mount Bracket

WV-QPL500-W
Mount Bracket

WV-QJB500-W
Mount Bracket

WV-QEM100-W
Mount Bracket

WV-QCN500-W
Mount Bracket

WV-QCL101-W
Mount Bracket

WV-QCL100-W
Mount Bracket

WV-Q105A
Mount Bracket

WV-QDC200C
Dome Cover

WV-PM500
Compact microphone unit

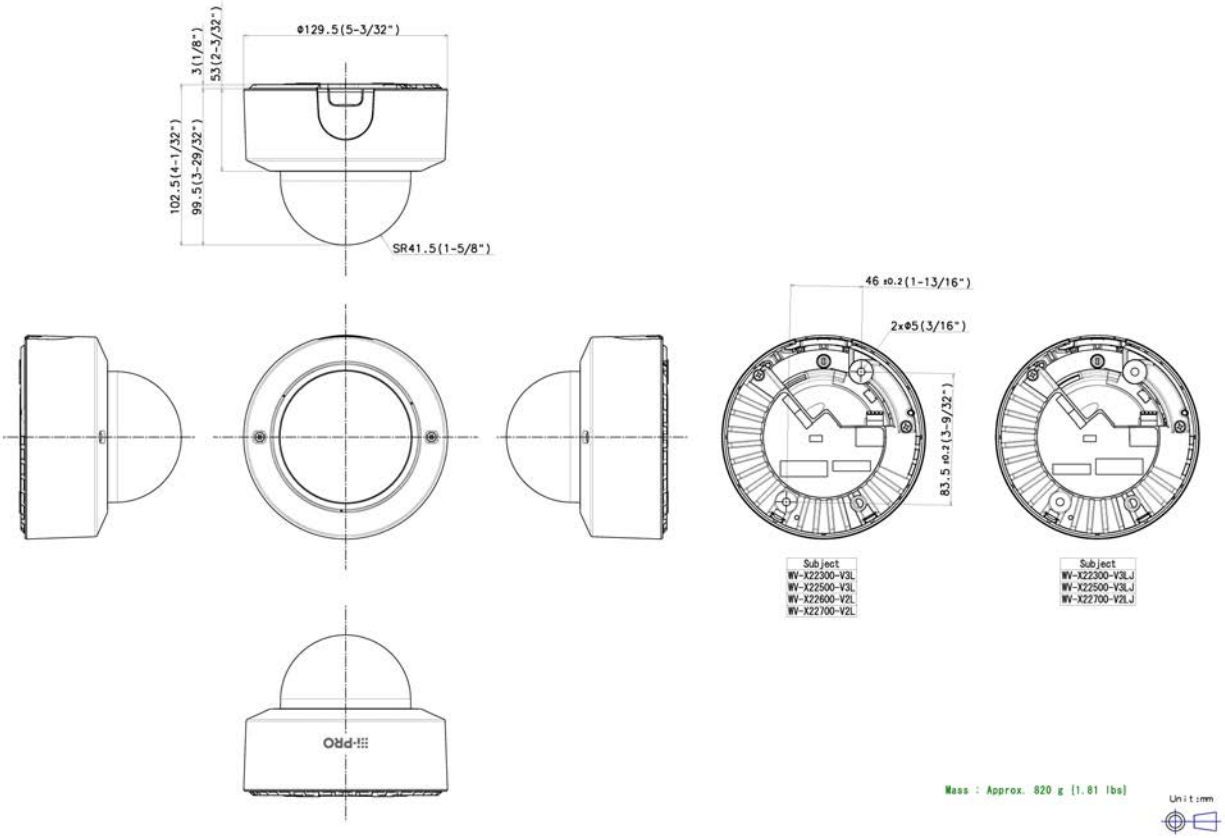
WV-CR1S
Dome Cover

WV-SDB128G
i-PRO SD Memory Card

WV-SDB064G
i-PRO SD Memory Card

WV-SDB032G
i-PRO SD Memory Card

APPEARANCE


ø129.5(5-3/32")
3(1/8")
53(2-3/32")
102.5(4-1/32")
99.5(3-29/32")
SR41.5(1-5/8")
46 ±0.2(1-13/16")
2×ø5(3/16")
83.5 ±0.2(3-9/32")
Subject
WV-X22300-V3L
WV-X22500-V3L
WV-X22600-V2L
WV-X22700-V2L
Subject
WV-X22300-V3LJ
WV-X22500-V3LJ
WV-X22700-V2LJ
Mass : Approx. 820 g [1.81 lbs]
Unit:mm