

WV-S8543LG

3x4MP(12MP) Outdoor Multi-Sensor Network Camera with AI Engine (Smoke Dome type)

*As of February 2022, based on i-PRO own research.

Industry thinnest* multi-sensor cameras with AI Engine



- 3 x 4MP(12MP) 2688x1520 up to 30fps
- 270° coverage with one IP address
- Intelligent Auto (with AI Engine)
- Super Dynamic 108dB
- Color night vision (0.21 to 0.3 lx)
- Smart Coding (with AI Engine)
- Built-in 360° IR LED
- Remote zoom and focus
- Continuous view assistance
- Wide range tilt angle adjustment mechanism
- Built-in FIPS 140-2 Level 3 Certified Secure Element with TPM functionality (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant



SPECIFICATIONS

| Camera | |
|---|---|
| Image Sensor | 3x 1/2.7 type CMOS image sensor |
| Minimum Illumination | Color : 0.59 lx {30IRE, F1.44, 1/30 s} Color : 0.85 lx {50IRE, F1.44, 1/30 s} BW : 0.34 lx {50IRE, F1.44, 1/30 s} BW: 0 lx {50IRE, F2.0, 1/30 s with IR LED} |
| White Balance | ATW1/ ATW2/ AWC |
| Maximum shutter | 30 fps mode: Max.1/10000s to Max.16/30s 25 fps mode: Max.1/10000s to Max.16/25s |
| Intelligent Auto | On / Off |
| Super Dynamic | On / Off, The level can be set in the range of 0 to 31. |
| Dynamic Range | Max. 108 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 : 15 m {Approx. 49 ft} (30IRE) 11 m {Approx. 36 ft} (50IRE) |
| Digital Noise Reduction | The level can be set in the range of 0 to 255. |
| Panorama | Panorama mode (H: 170 deg.) |
| 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 | Selectable from Gunshot, Yell, Vehicle horn, Glass break |
| AI Analytics | Yes |
| Privacy Zone | On / Off, Up to 8 zones available |
| VIQS | On / Off, Up to 8 zones available |
| Image Rotation | 0° (Off) / 90° / 180° (Upside-down) / 270° |
| Camera Title (OSD) | On / Off, Up to 40 characters, Up to 2 Lines (alphanumeric characters, marks) |
| Focus Adjustment | Auto focus |
| Lens | |
| Optical zoom | 2.5x (Motorized zoom / Motorized focus) |
| Extra zoom | max 10.5x (2.5x - 10.5x when resolution is 640x360) |
| Focal length | 2.9 mm {1/8 inches} - 7.3 mm {1/4 inches} |
| Angular Field of View | Horizontal: 43°(TELE) - 100°(WIDE), Vertical: 24°(TELE) - 56°(WIDE) |
| Maximum Aperture Ratio | 1 : 2.0(WIDE) - 1 : 3.0(TELE) |

| | |
|---------------------------------------|--|
| Focus range | 1 m {3.28 ft} – ∞ |
| DORI | |
| Detect (25ppm / 8ppf) | Wide : 45.1 m / 148.0 ft, Tele : 136.5 m / 447.8 ft |
| Observe (62.5ppm / 19ppf) | Wide : 18.0 m / 59.2 ft, Tele : 54.6 m / 179.1 ft |
| Recognize (125ppm / 38ppf) | Wide : 9.0 m / 29.6 ft, Tele : 27.3 m / 89.6 ft |
| Identify (250ppm / 76ppf) | Wide : 4.5 m / 14.8 ft, Tele : 13.6 m / 44.8 ft |
| System on Chip (SoC) | |
| System on Chip (SoC) | Ambarella CV2 |
| Adjusting Angle | |
| Adjusting Angle | <p>Camera 1, 2, 3 :</p> <p>Horizontal : ±125° (Adjust by horizontal (PAN) angle)</p> <p>Vertical : +10° to +105° (Adjust by vertical (TILT) angle)</p> <p>Yaw : ±90° (Adjust by azimuth (YAW) angle)</p> <p>Twist : ±30°</p> <p>*The above is the adjustable range of a single camera. The adjustable range of each camera varies according to the positional relationship with other cameras.</p> |
| 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 / 1000Base-T, RJ45 connector |
| Resolution H.265/ H.264/ JPEG (MJPEG) | [16 : 9 mode] 2688 x 1520 / 2560 x 1440 / 1920x1080 /1280 x 720 / 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 : On (Frame rate control)* / On (Advanced)* / On (Mid) / On (Low) / Off *On (Frame rate control) and On (Advanced) 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, 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, LLDP, MQTT |
| No. of Simultaneous Users | Up to 24 users (Depends on network conditions) |
| Secure | FIPS 140-2 level 3 Certified Secure Element (NXP® EdgeLock® SE050F), Device Certificate GlobalSign® pre-installed, User authentication, Host authentication, HTTPS, 802.1X Support, Data encryption |

| | |
|-------------------------------|--|
| 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, Android™ terminals |
| ONVIF® Profile | G / M / S / T |

| 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 | |
|---------------------------------|--|
| Monitor Output (for Adjustment) | — |
| Audio input | <p>ø3.5 mm stereo mini jack</p> <p>For microphone input : Recommended applicable microphone : Plug-in power type (Sensitivity of microphone : -48 dB±3 dB (0 dB=1 V/Pa, 1 kHz)) Input impedance : Approx. 2 kΩ (unbalanced) Supply voltage : 2.4 V ±0.5 V</p> <p>For line input : Input level: Approx. -10 dBV</p> |
| Audio Output | <p>ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 Ω (unbalanced) Output level : -20 dBV</p> |
| 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/ ALARM OUT/ AUX OUT) (x1) |

| 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, EN55024 |
| Power Source and Power Consumption | PoE+ (IEEE802.3at compliant): DC 54 V: 470 mA/Approx. 25.4 W (Class 4 device) |
| Ambient Operating Temperature | -40 °C to +60 °C*7 {-40 °F to 140 °F} (Power On range: -20 °C to +60 °C {-4 °F to 140 °F}) Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C(165 °F) |
| Ambient Operating Humidity | 10 to 100 % (no condensation) |
| Anti-Condensation System | Temish element + Heater + moisture absorption gel |
| Water and Dust Resistance | IP67/IP66 (IEC 60529), Type 4X (UL50E), NEMA 4X compliant |
| Shock Resistance | IK10 (IEC 62262) |
| Other standard support | NEMA TS 2 (2.2.7-2.2.9) |
| Dimensions | When using the attachment plate only : ø300 mm × 90 mm (H) {ø11-13/16 inches ×3-17/32 inches (H)} |
| Mass (approx.) | When using the attachment plate only : Approx. 3.1 kg {6.83 lbs} |
| Finish | Main body : Aluminum die cast, i-PRO white Outer fixing screws : Stainless steel (Corrosion-resistant treatment) Dome cover : PC resin, Smoke |

| AI Analytics applications | |
|------------------------------------|-----|
| AI Video Motion Detection (AI-VMD) | YES |
| AI Face Detection | YES |
| AI People Detection | YES |

| | |
|------------------------|-----|
| AI Vehicle Detection | YES |
| AI Non mask Detection | YES |
| AI Occupancy Detection | YES |

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.

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 / November 2022

OPTIONAL ACCESSORIES

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



WV-QDC501G
Dome Cover



WV-QSR503-W
Mount Bracket



WV-QWL501-W
Mount Bracket



WV-QCL501-W
Mount Bracket



WV-QJB503-W
Base Bracket

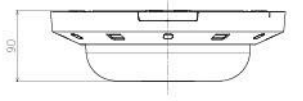
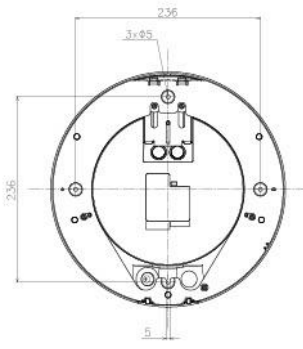
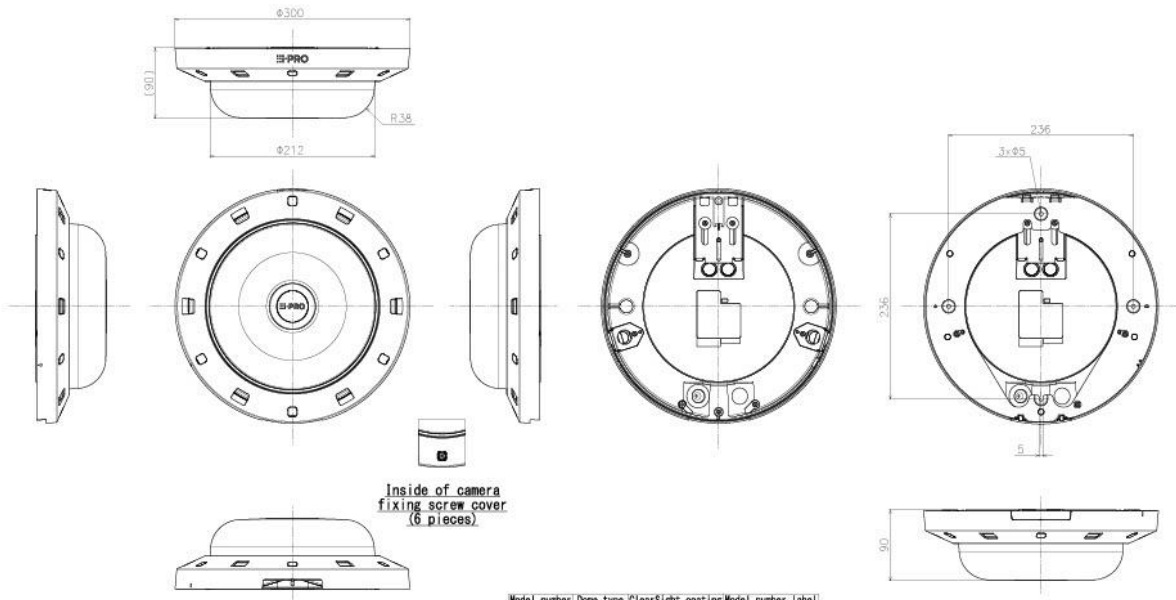


WV-Q105A
Mount Bracket



WV-QCA501A
I/O Cable

APPEARANCE



With Attachment Plate

Inside of camera fixing screw cover (6 pieces)

| Model number | Dome type | ClearSight coating | Model number | label |
|--------------|------------|--------------------|--------------|-------|
| WV-SB573L | Clear dome | No | | No |
| WV-SB573LN | Clear dome | Yes | | Yes |
| WV-SB573LG | Smoke dome | No | | Yes |
| WV-SB563L | Clear dome | No | | No |
| WV-SB563LN | Clear dome | Yes | | Yes |
| WV-SB563LG | Smoke dome | No | | Yes |
| WV-SB543L | Clear dome | No | | No |
| WV-SB543LN | Clear dome | Yes | | Yes |
| WV-SB543LG | Smoke dome | No | | Yes |
| WV-SB543 | Clear dome | No | | No |
| WV-SB543N | Clear dome | Yes | | Yes |
| WV-SB543G | Smoke dome | No | | Yes |

| 側面圖/Side-view | 投影面積/Projected area |
|---------------|-------------------------|
| | 0.021 (m ²) |

Mass : Approx. 3.1 kg (6.84 lbs) (When using the attachment plate)