

WV-S65302-Z2G

2MP (1080p) 21x Outdoor PTZ Network Camera

S-series PTZ camera with AI Engine



- 2MP (1080p) 1920x1080
- 21x optical zoom
- Intelligent Auto (with AI Engine)
- Super Dynamic 144dB
- Color night vision (0.003 to 0.045 lx)
- Durable Pan/Tilt gear mechanism
- IP66, IK10 certified
- Built-in FIPS 140-2 Level 3 Certified Secure Element with TPM functionality (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

SPECIFICATIONS

| Camera | |
|---|--|
| Image Sensor | Approx. 1/2.8 type CMOS image sensor |
| Minimum Illumination | Color : 0.045 lx (50IRE, F1.6, 1/30s) Color : 0.003 lx (50IRE, F1.6, 16/30s) BW : 0.017 lx (50IRE, F1.6, 1/30s) BW : 0.0011 lx (50IRE, F1.6, 16/30s) |
| 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 |
| Intelligent Auto | On / Off |
| Super Dynamic | On / Off, The level can be set in the range of 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 The level can be set in the range of 0 to 31 (only when Super dynamic / Intelligent Auto : Off) |
| Fog compensation | On / Off, The level can be set in the range of 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 / Auto1 / Auto2 / Auto3 (SCC) |
| 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 | Yes |
| Privacy Zone | On / Off, Up to 32 zones available |
| VIQS | On / Off, Up to 8 zones available |
| Image Stabilizer | On / Off (available only in the 30 fps mode) |
| Camera Title (OSD) | On / Off, Up to 40 characters (alphanumeric characters, marks) |
| Focus Adjustment | Auto focus |
| Lens | |
| Optical zoom | 21x (Motorized zoom / Motorized Focus) |
| Extra zoom | Max. 31x (21 to 31x : When resolution is 1280 x 720) |
| Focal Length | 4.0 - 84.6 mm {5/32 inches - 3-21/64 inches} |

| | |
|------------------------|--|
| Angular Field of View | [16 : 9 mode] Horizontal : 3.7° (TELE) - 77° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE) [4 : 3 mode] Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE) |
| Maximum Aperture Ratio | 1 : 1.6 (WIDE) - 1 : 4.5 (TELE) |
| Focus Range | 1.5 m {50-1/16 inches} - ∞ |

DORI

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|----------------------------|--|
| Detect (25ppm / 8ppf) | Wide: 51.9m / 170.3 ft, Tele: 1293.8 m / 4244.9 ft |
| Observe (62.5ppm / 19ppf) | Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft |
| Recognize (125ppm / 38ppf) | Wide: 10.4 m / 34.1 ft, Tele: 258.8 m / 849.0 ft |
| Identify (250ppm / 76ppf) | Wide: 5.2m / 17.0 ft, Tele: 129.4 m / 424.5 ft |

System on Chip (SoC)

| | |
|----------------------|-----------------|
| System on Chip (SoC) | Ambarella CV25M |
|----------------------|-----------------|

Adjusting Angle

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|-----------------|---|
| Adjusting Angle | Horizontal : 360° Endless Panning, Vertical : -15° to +195°, Yaw : 0° |
|-----------------|---|

Pan/tilt

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| Panning Range | 360° Endless Panning |
| Panning Speed | Manual: Approx. 0.065°/s - 150°/s Preset: Up to approx. 500°/s |
| Tilting Range | Operational -15 - +195° |
| Tilting Speed | Manual: Approx. 0.065°/s -150°/s Preset: Up to approx. 500°/s (PoE+), Up to approx. 350°/s (DC12 V PoE) |
| Preset Positions | 256 positions |
| Auto Mode | Auto track/ Auto pan/ Preset sequence/ Patrol |
| Self Return | 10 s/ 20 s/ 30 s/ 1 min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 30 min/ 60 min |

Browser GUI

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|---------------------------|--|
| 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 | 10 Base-T / 100 Base-TX, RJ45 connector |
| Resolution H.265/ H.264 JPEG (MJPEG) | [16 : 9 mode (60 fps mode)] , [16 : 9 mode (30 fps mode)], [16 : 9 mode (50 fps mode)] , [16 : 9 mode (25 fps mode)] 1920x1080, 1280x720, 640x360, 320x180 [4 : 3 mode (30 fps mode)], [4 : 3 mode (25 fps mode)] 1280x960, VGA, QVGA [4 : 3 mode (15 fps mode)], [4 : 3 mode (12.5 fps mode)] 2048x1536 , 1280x960, VGA, QVGA |
| 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 |

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|-----------------------------------|--|
| 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 Coding: Auto VIQS: 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, SNMPv1/v2/v3, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, SFTP, MQTT, NTCIP |
| No. of Simultaneous Users | Up to 14 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 (Option) | 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) |

| 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 and Power Consumption | DC12 V, PoE (IEEE802.3af), PoE+ (IEEE802.3at) DC12 V: 1.3 A / Approx.15.6 W PoE DC 48 V: 270 mA / Approx.12.95 W (Class 0 device) PoE+ DC 54 V: 340 mA / Approx.18.4 W(Class 4 device) |
| Ambient Operating Temperature | -30 °C to +55 °C (-22 °F to +131 °F) (Power On range : -20 °C to +55 °C {-4 °F to +131 °F}) Maximum temperature according to NEMA TS2(2.2.7) : 74 °C(165 °F) |

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|----------------------------|---|
| Ambient Operating Humidity | 10 to 100 % (no condensation) |
| Anti-Condensation System | Temish element |
| Water and Dust Resistance | IP66, IEC60529 measuring standard compatible, Type 4X(UL50E), NEMA 4X compliant |
| Shock Resistance | IK10 (IEC 62262) |
| Other standard support | NEMA TS2(2.2.7-2.2.9) |
| Dimensions | ø165 mm x 153 mm (H) {ø6-1/2 inches x 6-1/32 inches (H)} |
| Mass (Approx.) | Approx. 1.7 kg {3.75 lbs.} |
| Finish | Main body : Aluminum die cast, Black polycarbonate resin, i-PRO white Outer fixing screws : Stainless steel (Corrosion-resistant treatment) Dome section : Polycarbonate resin, Smoke |

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/Accessory_Selector)



WV-QDC502G
Dome Cover



WV-QWL500-W
Mount Bracket



WV-QJB500-W
Mount Bracket



WV-QWL501-W
Mount Bracket



WV-QSR501-W
Mount Bracket



WV-QSR501F1-W
Mount Bracket



PWM40W
Wall Mount Bracket



PWM25W
Gooseneck Wall Mount



PAPM4W
Pole Mount Bracket



PACA4W
Corner Mount Adapter
Bracket



WV-QSR501M1-W
Mount Bracket



WV-QCL101-W
Mount Bracket



WV-QCL501-W
Mount Bracket



WV-QJB501-W
Base Bracket



WV-QEM504-W
Ceiling Mount Bracket



WV-QJB504-W
Base Bracket



PPRM35W
Parapet Mount Bracket



WV-QSR501F-W
Mount Bracket



WV-QSR501M-W
Mount Bracket

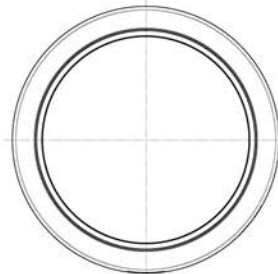
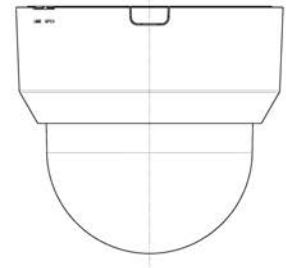
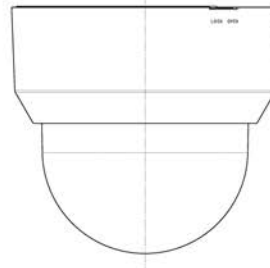
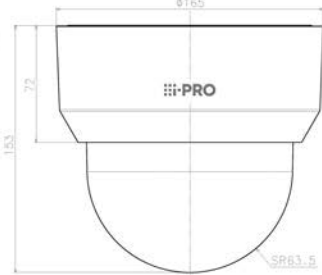
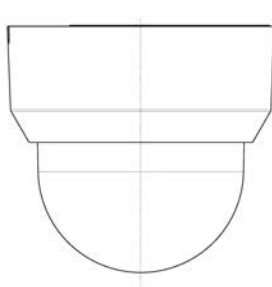
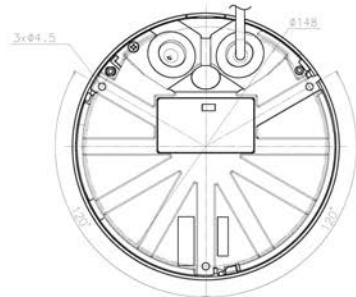


WV-QCA501A
I/O Cable

APPEARANCE



Object model: WV-B65302-Z2



| Model number | Dome type | Decorative cover coating |
|----------------------------------|------------|--------------------------|
| WV-U65302-Z2 | Clear dome | |
| WV-U65302-Z2G | Smoke dome | |
| WV-B65302-Z2 | Clear dome | i-PRO white |
| WV-S65302-Z2 | Clear dome | |
| WV-S65302-Z2G | Smoke dome | |
| WV-S65302-Z2J | Smoke dome | |
| WV-S65302-Z2-I | Clear dome | Black |
| WV-S65302-Z2-IJ | Clear dome | Black |
| 側面図/Side-view | | 投影面積/Projected area |
| | | 0.020 (m ²) |
| Mass - Approx. 1.4 kg (3.09 lbs) | | |