

# WV-S15500-V3LK

5MP Outdoor Bullet Network Camera

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

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- 5MP
- Intelligent Auto (with AI Engine)
- Super Dynamic 132dB
- Color night vision (0.05 to 0.07 lx)
- Smart Coding (with AI Engine)
- ClearSight Coating
- Built-in IR LED
- Heavy salt damage resistance specifications (ISO 14993 compliant)
- Built-in FIPS 140-2 Level 3 Certified Secure Element (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

### Precautions for heavy salt damage resistance

# SPECIFICATIONS

| Camera  |   |
|---|---|
| Image Sensor                                    | Approx. 1/2.8 type CMOS image sensor  |
| Scanning Area                                   | 5.12 mm (H)×3.84 mm (V)<br>{3/16 inches (H) × 5/32 inches (V)}  |
| Minimum Illumination                            | Color :<br>0.05 lx (30IRE, F1.5, 1/30s, AGC:11)*<br>0.07 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>0.04 lx (50IRE, F1.5, 1/30s, AGC:11)<br>0.003 lx (50IRE, F1.5, 16/30s, AGC:11)*<br>*Converted value   |
| White Balance                                   | ATW1/ ATW2/ AWC   |
| Shutter Speed                                   | [30 fps/15 fps mode] 1/30 Fix to 1/10000 Fix<br>[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. 132 dB (Super Dynamic : On, Level : 30 or more, 15fps)   |
| 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                                    | 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) /<br>Auto2 (IR Light On) / Auto3 (SCC)  |
| IR LED Light                                    | High / Middle / Low / Off,<br>Maximum irradiation distance : 55 m {Approx. 180 ft} (30IRE)<br>40 m {Approx. 131 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,<br>AI Non mask Detection (prior to V2.70), AI Occupancy 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,<br>Up to 8 zones available  |
| VIQS  | On / Off,<br>Up to 8 zones available  |
| Image Rotation                                  | 0 ° / 90 ° / 180 ° / 270 °  |

|                                       |  |
|---------------------------------------|--|
| Camera Title (OSD)                    | On / Off,<br>Up to 40 characters (alphanumeric characters, marks)  |
| Focus Adjustment                      | Auto focus   |
| <b>Lens</b>                           |  |
| Optical zoom                          | 3.1x (Motorized zoom / Motorized Focus)  |
| Extra zoom                            | 3.1x - 9.3x (when resolution is 640 x 360)   |
| Focal length                          | 2.9 - 9 mm {1/8 inches - 11/32 inches}   |
| Angular Field of View                 | [16 : 9 mode]<br>Horizontal : 34° (TELE) - 106° (WIDE), Vertical : 19° (TELE) - 57° (WIDE)<br>[ 4 : 3 mode]<br>Horizontal : 34° (TELE) - 106° (WIDE), Vertical : 25° (TELE) - 77° (WIDE)   |
| Maximum Aperture Ratio                | 1 : 1.3 (WIDE) - 1 : 2.5 (TELE)  |
| Focus range                           | 0.3 m {11-13/16 inches} - ∞  |
| <b>DORI</b>                           |  |
| Detect (25ppm / 8ppf)                 | Wide: 46.3 m / 151.9 ft, Tele: 201.0 m / 659.3 ft  |
| Observe (62.5ppm / 19ppf)             | Wide: 18.5 m / 60.8 ft, Tele: 80.4 m / 263.7 ft  |
| Recognize (125ppm / 38ppf)            | Wide: 9.3 m / 30.4 ft, Tele: 40.2 m / 131.9 ft   |
| Identify (250ppm / 76ppf)             | Wide: 4.6 m / 15.2 ft, Tele: 20.1 m / 65.9 ft  |
| <b>System on Chip (SoC)</b>           |  |
| System on Chip (SoC)                  | Ambarella CV22   |
| <b>Adjusting Angle</b>                |  |
| Ceiling mounting                      | Horizontal : ±180 ° (PAN rotation part)<br>Vertical : 0 ° to 100 ° (TILT rotation part)<br>Yaw : -190 ° to +100 ° (YAW rotation part)  |
| Wall mounting                         | Horizontal : ±100 ° (TILT rotation part)*<br>Vertical : ±100 ° (TILT rotation part)*<br>Yaw : -190 ° to +100 ° (YAW rotation part)<br>* You can change between horizontal and vertical angels by adjusting the PAN rotation part.                          |
| <b>Browser GUI</b>                    |  |
| 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   |
| <b>Network</b>                        |  |
| 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>3072x1728 / 2560x1440 / 1920x1080 / 1280x720 / 640x360 / 320x180<br>[4 : 3 mode (30 fps mode)][4 : 3 mode (25 fps mode)]<br>3072x2304 / 2560x1920 / 1280x960 / 800x600 / VGA / 400x300 / 320x240 |
| 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) / 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,<br>iPhone (iOS 8.0 or later),<br>Android™ terminals  |
| ONVIF® Profile                | G / M / S / T  |

## Alarm

|               |   |
|---------------|---|
| Alarm Source  | 3 terminals input,<br>VMD alarm,<br>Command alarm,<br>Audio detection alarm   |
| Alarm Actions | SDXC/SDHC/SD memory recording, E-mail notification,<br>HTTP alarm notification Indication on browser, 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, 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 | -40 °C to +60 °C (-40 °F to 140 °F)*9<br>(Power On range : -30 °C to +60 °C {-22 °F to +140 °F})  |
| Ambient Operating Humidity    | 10 to 100 % (no condensation)   |
| Anti-Condensation System      | Temish element + Heater + moisture absorption gel   |
| Water and Dust Resistance     | IP66, IEC60529 measuring standard compatible, Type 4X(UL50E), NEMA 4X compliant   |
| Shock Resistance              | IK10 (IEC 62262)  |
| Wind Resistance               | Up to 40 m/s {approx. 89 mph}   |
| Dimensions                    | ø133 mm (W) x 133 mm (H) x 383 mm (D)<br>{ø5-1/4 inches (W) x 5-1/4 inches (H) x 15-3/32 inches (D)}  |
| Mass (approx.)                | Approx. 2.4 kg {5.3 lbs.}   |
| Finish                        | Main body : Aluminum die cast and resin, i-PRO white<br>Outer fixing screws : Stainless steel (Corrosion-resistant treatment)<br>Front panel : Polycarbonate resin, Clear (with ClearSight coating) |
| Other                         | WV-S15500-V3LK : Heavy salt damage resistance specifications (ISO 14993 compliant)  |

## 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-QCA501A  
I/O Cable

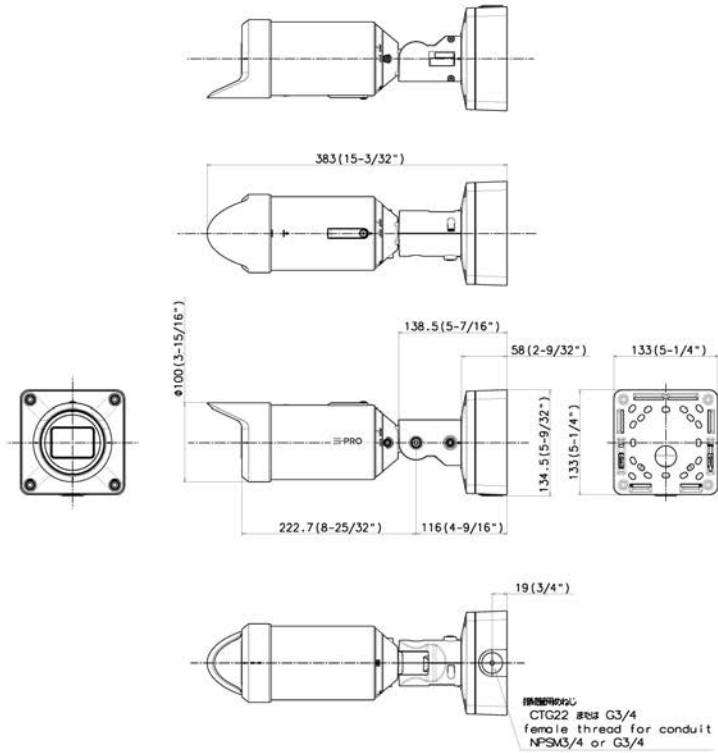


WV-QCA500A  
RJ45 Ethernet Cable



WV-PM500  
Compact microphone  
unit for surveillance  
cameras

# APPEARANCE



|               | 投影面積/Projected area    |
|---------------|------------------------|
| 平面圖/Top-view  | 0.033(m <sup>2</sup> ) |
| 側面圖/Side-view | 0.030(m <sup>2</sup> ) |

Mass : Approx. 2.4 kg [5.3 lbs]

Unit:mm