

## U series PTZ camera

# 2MP (1080p) 3.1x Indoor PTZ Network Camera

U-Series launch gives customers PTZ's that meet top security certifications (FIPS 140-2 level 3) while also providing a unique blend of imaging performance, reliability and affordability.

### Highly durable pan-tilt drive unit Reduced maintenance costs

- PAN,TILT drive endurance (1 million movements) to reduce maintenance frequency.

### Easy installation

- U-series compact PTZ cameras can be installed discreetly and easily on low ceilings.
- Easy kitting packaging allows the camera to be set up without removing it from the box during kitting prior to installation.
- The addition of a diverse lineup of mounting brackets and optional PoE injectors enables flexible installation regardless of the location of new or existing installations.

### High security standard

- Highest level of security. In addition to digital certificates issued by a third-party organization (GlobalSign®), FIPS 140-2 level3-certified hardware is installed.

### Key i-PRO Spec.

- 2MP (1080p) 1920x1080
- 3.1x optical zoom
- Intelligent Auto
- Super Dynamic 144dB
- Color night vision (0.001 to 0.01 lx) (G : 0.002 to 0.03 lx)
- ONVIF® Profile G / S / T \*ONVIF is a trademark of ONVIF, Inc.
- FIPS 140-2 level3 certified

### Industry examples

- Retail (Shopping mall) / Logistics
- Transportation (Airport / Train, Subway station)
- Bank
- Building



WV-U61300-ZY



WV-U61300-ZYG (Smoke Dome)



## Specifications

|                             |  |  |
|-----------------------------|--|--|
| <b>Camera</b>               | Image Sensor   | Approx. 1/2.8 type CMOS image sensor   |
|                             | Minimum Illumination   | Color : 0.01 lx (G: 0.03 lx) (50IRE, F1.3, 1/30s)<br>Color : 0.001 lx (G: 0.002 lx) (50IRE, F1.3, 16/30s)*1<br>BW : 0.004 lx (G: 0.012 lx) (50IRE, F1.3, 1/30s)<br>BW : 0.0003 lx (G: 0.0008 lx) (50IRE, F1.3, 16/30s) |
|                             | White Balance  | ATW1 / ATW2 / AWC  |
|                             | Shutter Speed  | [60 fps Mode] 1/60 Fix to 1/10000 Fix,<br>[30 fps/15 fps mode] 1/30 Fix to 1/10000 Fix<br>[50 fps Mode] 1/50 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*2  | 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<br>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  | —  |
|                             | AI Analytics   | —  |
|                             | Privacy Zone   | On / Off, Up to 32 zones available   |
|                             | VIQS   | On / Off, Up to 8 zones available  |
| Camera Title (OSD)          | On / Off, Up to 40 characters (alphanumeric characters, marks) |  |
| Focus Adjustment            | Auto focus   |  |
| <b>Lens</b>                 | Optical zoom   | 3.1x (Motorized zoom / Motorized Focus)  |
|                             | Extra zoom   | Max. 4x (3.1 to 4x : When resolution is 1280 x 720)  |
|                             | Focal length   | 2.9 - 9 mm [1/8 inches - 11/32 inches]   |
|                             | Angular Field of View  | [16 : 9 mode]<br>Horizontal : 36° (TELE) - 115° (WIDE), Vertical : 20° (TELE) - 61° (WIDE)<br>[4 : 3 mode]<br>Horizontal : 28° (TELE) - 82° (WIDE), Vertical : 20° (TELE) - 61° (WIDE)                                 |
|                             | Maximum Aperture Ratio   | 1 : 1.3 (WIDE) - 1 : 2.5 (TELE)  |
| <b>DORI</b>                 | Focus range  | 0.3 m (11-13/16 inches) - ∞  |
|                             | Detect (25ppm / 8ppf)  | Wide: 25.4 m / 83.4 ft, Tele: 118.2 m / 387.7 ft   |
|                             | Observe (62.5ppm / 19ppf)                                      | Wide: 10.2 m / 33.4 ft, Tele: 47.3 m / 155.1 ft  |
|                             | Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)        | Wide: 5.1 m / 16.7 ft, Tele: 23.6 m / 77.5 ft<br>Wide: 2.5 m / 8.3 ft, Tele: 11.8 m / 38.8 ft  |
| <b>System on Chip (SoC)</b> |  | Ambarella CV25M  |
| <b>Adjusting Angle</b>      |  | Horizontal : 0 to +350°, Vertical : 0 to +90°, Yaw : 0°  |
| <b>Pan/tilt</b>             | Panning Range  | 0 - +350°  |
|                             | Panning Speed  | Manual: Approx. 0.065°/s - 150°/s<br>Preset: Up to approx. 150°/s  |
|                             | Tilting Range  | Operational 0 - +90°   |
|                             | Tilting Speed  | Manual: Approx. 0.065°/s - 150°/s Preset: Up to approx. 150°/s   |
|                             | Preset Positions   | 256 positions  |
| <b>Browser GUI</b>          | Auto Mode  | 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   |
|                             | 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   |
| <b>Network</b>              | GUI / Setup Menu Language                                      | English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese<br>Browser*3   |
|                             | Microsoft Edge, Firefox, Google Chrome                         |  |
| <b>Network</b>              | Network I/F  | 10Base-T / 100Base-TX, RJ45 connector  |
|                             | Resolution   | [16 : 9 mode (60 fps mode)]*2, [16 : 9 mode (30 fps mode)],<br>[16 : 9 mode (50 fps mode)]*2, [16 : 9 mode (25 fps mode)]<br>1920x1080, 1280x720, 640x360, 320x180   |
|                             | H.265/ H.264 / JPEG (MJPEG)                                    | [4 : 3 mode (30 fps mode)], [4 : 3 mode (25 fps mode)]<br>1280x960, VGA, QVGA<br>[4 : 3 mode (15 fps mode)], [4 : 3 mode (12.5 fps mode)]<br>2048x1536*4, 1280x960, VGA, QVGA  |
|                             | H.265/ H.264*5<br>JPEG   | Transmission Mode : Constant bit rate / VBR / Frame rate / Best effort<br>Transmission Type : Unicast port (AUTO) / Unicast port (MANUAL) / Multicast<br>Image Quality : 10 steps                                      |

|                      |                                    |  |
|----------------------|------------------------------------|--|
| <b>Network</b>       | Smart Coding                       | <b>GOP (Group of pictures) control:</b><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><b>Smart Coding: Auto VIQS: On/Off</b>   |
|                      | Audio Compression                  | G.726 (ADPCM) : 16 kbps / 32 kbps<br>G.711 : 64 kbps<br>AAC-LC*6 : 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<br>IPv4 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP,<br>DHCP, DNS, DDNS, NTP, SNMPv1/v2/v3, UPnP, IGMP, ICMP, ARP,<br>IEEE 802.1X, DiffServ, SRTP, MQTT, NTCP   |
|                      | No. of Simultaneous Users          | Up to 14 users (Depends on network conditions)   |
|                      | Secure                             | FIPS 140-2 level3, Device Certificate GlobalSign® pre-installed  |
|                      | 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, iPhone (iOS 8.0 or later), Android™ terminals  |
|                      | ONVIF® Profile                     | G / S / T  |
|                      | <b>Alarm</b>                       | Alarm Source   |
| Alarm Actions        |                                    | SDXC/SDHC/SD memory recording, E-mail notification,<br>HTTP alarm notification Indication on browser, TCP alarm notification output  |
| <b>Input/ Output</b> | Audio input                        | Ø3.5 mm stereo mini jack<br>For microphone input : Recommended applicable microphone : Plug-in power type (Sensitivity of microphone : -51 dB to -38 dB (0 dB=1V/Pa, 1 kHz))<br>Input impedance : Approx. 2 kΩ (unbalanced)<br>Supply voltage : 2.5 V ±0.5 V<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  |
| <b>General</b>       | 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), ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)   |
|                      | Safety                             | UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1  |
| <b>General</b>       | EMC                                | FCC (Part15 ClassA), ICES-003 Issue 7 ClassA, EN55032 ClassA, EN55035  |
|                      | Power Source and Power Consumption | DC12 V, PoE (IEEE802.3af)<br>DC12 V: 890 mA / Approx. 10.7 W<br>PoE DC 48 V: 250 mA / Approx.12.0 W (Class 0 device)   |
|                      | Ambient Operating Temperature      | -10 °C to +50 °C (+14 °F to +122 °F)<br>(Power On range : 0 °C to +50 °C (+32 °F to +122 °F))  |
|                      | Ambient Operating Humidity         | 10 to 90 % (no condensation)   |
|                      | Anti-Condensation System           | —  |
|                      | Dimensions                         | Ø131 mm x 128 mm (H) (Ø5-5/32 inches x 5-1/32 inches (H))  |
|                      | Mass (approx.)                     | Approx. 0.8 kg (1.76 lbs.)   |
|                      | Finish                             | Main body : Resin, i-PRO white<br>Dome section : polycarbonate resin, Clear (G: Smoke)   |

\*1 Converted value

\*2 When 60 fps or 50 fps is selected, the Super Dynamic function is automatically set to off.

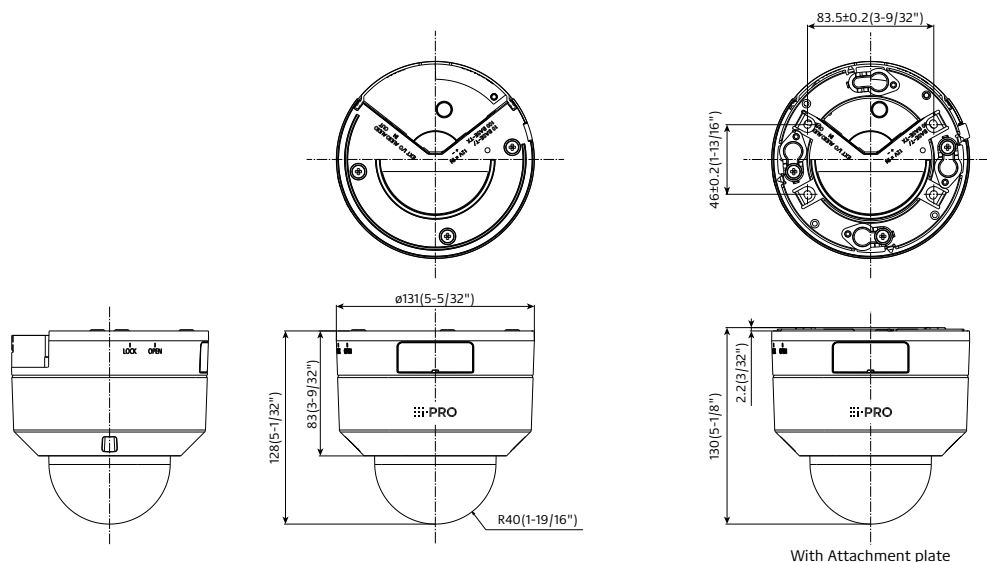
\*3 For information on the operation verification of the supported web browsers, refer to our support website <Control No. C0132>.

\*4 Used by super resolution techniques

\*5 Transmission for 4 streams can be individually set.

\*6 When recording audio on an microSD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity).














## Appearance










Unit : mm (inches)

## Optional Accessories

### Mount Bracket / Other

|             | WALL   |   | POLE   | CORNER   | HANGING   |   |
|-------------|--|---|--|--|---|---|
|             | 1  | 2   | 1  | 1  | 1   | 2   |
| combination | Wall Mount Bracket<br><b>WV-QWL501-W</b><br>(i-PRO white)<br> | Wall Mount Bracket<br><b>WV-QWL500-W</b><br>(i-PRO white)<br>                        | Pole Mount Bracket<br><b>WV-QPL500-W</b><br>(i-PRO white)<br> | Corner Mount Bracket<br><b>WV-QCN500-W</b><br>(i-PRO white)<br> | Ceiling Mount Bracket<br><b>WV-QCL501-W</b><br>(i-PRO white)<br> | Ceiling Mount Bracket<br><b>WV-QCL100-W</b> *1<br>(i-PRO white)<br><br><small>*For indoor installation only.</small> |
|             | Mount Bracket<br><b>WV-QSR501-W</b><br>(i-PRO white)<br>      | Adapter Box<br><b>WV-QJB500-W</b><br>(i-PRO white)<br><br><small>*if needed.</small> | Wall Mount Bracket<br><b>WV-QWL501-W</b><br>(i-PRO white)<br> | Wall Mount Bracket<br><b>WV-QWL501-W</b><br>(i-PRO white)<br>   | Mount Bracket<br><b>WV-QSR501-W</b><br>(i-PRO white)<br>         |   |
|             |  |   | Mount Bracket<br><b>WV-QSR501-W</b><br>(i-PRO white)<br>      | Mount Bracket<br><b>WV-QSR501-W</b><br>(i-PRO white)<br>        |   |   |

\*1: It's possible to be used on the camera side and ceiling side. If used on both side, 2pieces are required.

|             | CEILING  |   | OTHER  |
|-------------|--|---|--|
|             | 1  | 2   | 1  |
| combination | Base Bracket<br><b>WV-QJB501-W</b><br>(i-PRO white)<br> | Ceiling Mount Bracket (Embedded)<br><b>WV-QEM501-W</b><br>(i-PRO white)<br><br><small>*For indoor installation only.</small>   | Base bracket<br><b>WV-QJB504-W</b><br>(i-PRO white)<br>   |
|             |  |   | 3rd Party Pipe<br>(Male or Female type)  |
|             |  |   | Mount Bracket<br><b>WV-QSR501F-W</b><br>(i-PRO white, ISO Female thread)<br><br><b>WV-QSR501M-W</b><br>(i-PRO white, ISO Male thread)<br> |
|             |  | Mount Bracket<br><b>WV-QSR501F1-W</b><br>(White, ANSI Female thread)<br><br><b>WV-QSR501M1-W</b><br>(White, ANSI Male thread)<br> |  |

### Dome Cover

Dome Cover (Smoke type)  
**WV-CF5S**



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#### 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.