

# WV-U65302-Z2 WV-U65302-Z2G

## U series PTZ camera

## 2MP (1080p) 21x Outdoor 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

- High durability gear drive achieves PAN and TILT drive durability (3.7 million movements). Low failure rate even with high frequency drive and reduced maintenance cost by minimizing the maintenance cycle.

#### **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 x21 and x10 models of the U Series outdoor DOME are shipped with a waterproof LAN extension cable installed. The DOME can be installed without opening the DOME at sites where conventional pigtails are used.
- 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
- 21x optical zoom
- Intelligent Auto
- Super Dynamic 144dB
- Color night vision (0.001 to 0.015 lx) (G: 0.003 to 0.045 lx)
- Durable Pan/Tilt gear mechanism
- IP66, IK10 certified
- ONVIF® Profile G / S / T \*ONVIF is a trademark of ONVIF, Inc.
- FIPS 140-2 level3 certified

#### Industry examples

- Safe Cities
- Transportation (Airport / Train, Subway station)
- Stadium
- Critical infrastructure







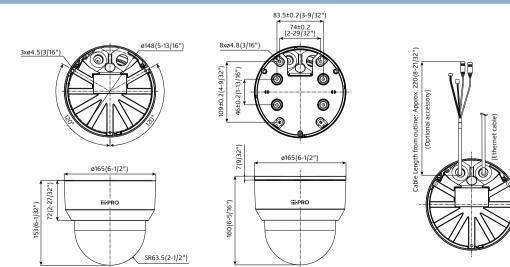
#### Specifications

| Camera  | Image Sensor   | Approx. 1/2.8 type CMOS image sensor  |  |  |
|---|--|---|--|--|
|   | Minimum Illumination   | Color : 0.015 lx (G: 0.045 lx) (50IRE, F1.6, 1/30s)   |  |  |
|   |  | Color : 0.001 lx (G: 0.003 lx) (50IRE, F1.6, 16/30s)*1  |  |  |
|   |  | BW : 0.006 lx (G: 0.017 lx) (50IRE, F1.6, 1/30s)  |  |  |
|   |  | BW : 0.0004 lx (G: 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 <sup>*2</sup>  | On / Off, The level can be set in the range of 0 to 31.   |  |  |
|   |  | Max.144 dB (Super Dynamic : On, Level 31)   |  |  |
|   | Dynamic Range  |   |  |  |
|   | Adaptive Black Stretch   | The level can be set in the range of 0 to 255.  |  |  |
|   | Back light compensation /  | BLC (Back light compensation) / HLC (High light compensation) / Off   |  |  |
|   | High light compensation  | 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   |  |  |
|   | 5 .  | (only when Intelligent auto / auto contrast adjust : Off)   |  |  |
|   | Maximum gain (ACC)   | The level can be set in the range of 0 to 11.   |  |  |
|   | Maximum gain (AGC)   |   |  |  |
|   | 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  |  |  |
|   | Al Sound Classification  |   |  |  |
|   |  |   |  |  |
|   | Al Analytics   | -   |  |  |
|   | Privacy Zone   | On / Off, Up to 8 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  |  |  |
| 1   |  |   |  |  |
| 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]   |  |  |
|   |  | [ 4:3 mode]   |  |  |
|   |  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)   |  |  |
|   | Maximum Aperture Ratio   | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1 : 1.6 (WIDE) - 1 : 4.5 (TELE)  |  |  |
|   | Maximum Aperture Ratio<br>Focus range  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1 : 1.6 (WIDE) - 1 : 4.5 (TELE)<br>1.5 m {50-1/16 inches} - ∞  |  |  |
| DORI  |  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1 : 1.6 (WIDE) - 1 : 4.5 (TELE)  |  |  |
| DORI  | Focus range<br>Detect (25ppm / 8ppf)   | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1:1.6 (WIDE) - 1: 4.5 (TELE)<br>1.5 m (50-1/16 inches) - ∞<br>Wide: 51.9 m / 170.3 ft, Tele: 1293.8 m / 4244.9 ft  |  |  |
| DORI  | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1:1.6 (WIDE) - 1: 4.5 (TELE)<br>1.5 m (50-1/16 inches) - ∞<br>Wide: 51.9 m / 170.3 ft, Tele: 1293.8 m / 4244.9 ft<br>Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft   |  |  |
| DORI  | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1:1.6 (WIDE) - 1: 4.5 (TELE)<br>1.5 m (50-1/16 inches) - ∞<br>Wide: 51.9 m / 170.3 ft, Tele: 1293.8 m / 4244.9 ft<br>Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 10.4 m / 34.1 ft, Tele: 258.8 m / 849.0 ft   |  |  |
|   | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)   | $\label{eq:second} \begin{split} & ^{1}\text{Horizontal}: 2.9^{\circ} (\text{TELE}) - 58^{\circ} (\text{WIDE}), \text{Vertical}: 2.2^{\circ} (\text{TELE}) - 44^{\circ} (\text{WIDE}) \\ & 1:1.6 (WIDE) - 1: 4.5 (\text{TELE}) \\ & .5.m (50-1)/6 \text{ inches}) - \infty \end{split}$<br>Wide: 51.9 m / 170.3 ft, Tele: 1293.8 m / 4244.9 ft<br>Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 10.4 m / 34.1 ft, Tele: 258.8 m / 849.0 ft<br>Wide: 5.2 m / 17.0 ft, Tele: 129.4 m / 424.5 ft \\ \end{split}   |  |  |
| System o  | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br>n Chip (SoC)   | $eq:started_st$   |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br>n Chip (SoC)<br>Angle  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1:1.6 (WIDE) - 1: 4.5 (TELE)<br>1.5 m (50-1/16 inches) - ∞<br>Wide: 51.9 m / 170.3 ft, Tele: 1293.8 m / 4244.9 ft<br>Wide: 20.8 m / 68.1 ft, Tele: 1293.8 m / 4244.9 ft<br>Wide: 10.4 m / 34.1 ft, Tele: 258.8 m / 849.0 ft<br>Wide: 5.2 m / 17.0 ft, Tele: 129.4 m / 424.5 ft<br>Ambarella CV25M<br>Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°  |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br>n Chip (SoC)   | eq:space-   |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br>n Chip (SoC)<br>JAngle<br>Panning Range  | eq:space-   |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br>n Chip (SoC)<br>Angle  | $\label{eq:second} \begin{split} & ^{1}\text{Horizontal}: 2.9^{\circ} (\text{TELE}) - 58^{\circ} (\text{WIDE}), \text{Vertical}: 2.2^{\circ} (\text{TELE}) - 44^{\circ} (\text{WIDE}) \\ & 1:1.6 (\text{WIDE}) - 1: 4.5 (\text{TELE}) \\ & 1.5 \text{ m} (50-1)16 \text{ inches}) - \infty \\ & \text{Wide}: 50.9 \text{ m} / 170.3 \text{ ft}, \text{Tele}: 129.8 \text{ m} / 4244.9 \text{ ft} \\ & \text{Wide}: 50.8 \text{ m} / 68.1 \text{ ft}, \text{Tele}: 575.5 \text{ m} / 1697.9 \text{ ft} \\ & \text{Wide}: 50.2 \text{ m} / 17.0 \text{ ft}, \text{Tele}: 575.8 \text{ m} / 849.0 \text{ ft} \\ & \text{Wide}: 52.\text{ m} / 17.0 \text{ ft}, \text{Tele}: 129.4 \text{ m} / 424.5 \text{ ft} \\ & \text{Ambarella} CV25M \\ & \text{Horizontal}: 360^{\circ} \text{ Endless Panning}, \text{Vertical}: -15 \text{ to} +195^{\circ}, \text{Yaw}: 0^{\circ} \\ & 360^{\circ} \text{ Endless Panning} \\ & \text{Manual: Approx}. 0.065^{\circ}\text{/s} - 150^{\circ}\text{/s} \\ & \text{Statistical constants} \\ & \text{Horizontal} = 500 \text{ ft} + 50^{\circ}\text{ ft} \\ & \text{Wide} = 50.2 \text{ m} + 50^{\circ}\text{ ft} \\ & \text{Manual} + 500^{\circ}\text{ constants} \\ & \text{Warellower for the statistical constants} \\ & \text{Manual} + 500^{\circ}\text{ constants} \\ & \text{Manual} + 500^{\circ$ |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br>n Chip (SoC)<br>n Angle<br>Panning Range<br>Panning Speed  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1:1.6 (WIDE) - 1: 4.5 (TELE)<br>1.5 m (50-1/16 inches) - ∞<br>Wide: 51.9 m / 170.3 ft, Tele: 1293.8 m / 4244.9 ft<br>Wide: 20.8 m / 68.1 ft, Tele: 1293.8 m / 4244.9 ft<br>Wide: 10.4 m / 34.1 ft, Tele: 258.8 m / 849.0 ft<br>Wide: 5.2 m / 17.0 ft, Tele: 129.4 m / 424.5 ft<br>Ambarella CV25M<br>Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°<br>360° Endless Panning<br>Manual: Approx. 0.065°/s - 150°/s<br>Preset: Up to approx. 500°/s   |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br><b>n Chip (SoC)</b><br>Panning Range<br>Panning Speed<br>Tilting Range   | $\label{eq:constraint} \begin{array}{l} \text{'Horizontal: } 2.9^\circ (\text{TELE}) - 58^\circ (\text{WIDE}), \text{Vertical: } 2.2^\circ (\text{TELE}) - 44^\circ (\text{WIDE}) \\ 1: 1.6 (WIDE) - 1: 4.5 (\text{TELE}) \\ 1.5 m (50^{-1}) / 16 \text{ inches}) - \infty \\ \hline \\ \text{Wide: } 51.9 m / 170.3 \text{ ft}, \text{Tele: } 129.3 m / 4244.9 \text{ ft} \\ \hline \\ \text{Wide: } 0.2 n m / 68.1 \text{ ft}, \text{Tele: } 517.5 m / 1697.9 \text{ ft} \\ \hline \\ \text{Wide: } 0.2 n m / 68.1 \text{ ft}, \text{Tele: } 517.5 m / 1697.9 \text{ ft} \\ \hline \\ \text{Wide: } 0.2 n m / 68.1 \text{ ft}, \text{Tele: } 129.4 m / 424.5 \text{ ft} \\ \hline \\ \text{Ambarella } CV25M \\ \hline \\ \text{Horizontal: } 360^\circ \text{ fndless Panning}, \text{Vertical: } -15 \text{ to } +195^\circ, \text{Yaw: } 0^\circ \\ \hline \\ 360^\circ \text{ Endless Panning} \\ \hline \\ \text{Manual: } \text{Approx. } 0.065^\circ/\text{s} - 150^\circ/\text{s} \\ \hline \\ \text{Preset: } \text{Up to approx. } 500^\circ/\text{s} \\ \hline \\ \text{Operational } -15 - +195^\circ \end{array}$  |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br>n Chip (SoC)<br>n Angle<br>Panning Range<br>Panning Speed  | eq:space-   |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br>n Chip (50C)<br>Angle<br>Panning Range<br>Panning Speed<br>Tilting Range<br>Tilting Speed  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1: 1.6 (WIDE) - 1: 4.5 (TELE)<br>1.5 m (50-1/16 inches) - ∞<br>Wide: 51.9 m / 170.3 ft, Tele: 129.8 m / 4244.9 ft<br>Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 10.4 m / 34.1 ft, Tele: 528.8 m / 849.0 ft<br>Wide: 52.0 m / 17.0 ft, Tele: 129.4 m / 424.5 ft<br>Ambarella CV25M<br>Horizontal: 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°<br>360° Endless Panning<br>Manual: Approx. 0.065° /s - 150° /s<br>Preset: Up to approx. 500° /s<br>Operational -15 - +195°<br>Annual: Approx. 0.065° /s -150° /s<br>Preset: Up to approx. 500° /s (PoE+), Up to approx. 350° /s (DC12 V POE)  |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br><b>n Chip (SoC)</b><br>Panning Range<br>Panning Speed<br>Tilting Range   | $\label{eq:second} \begin{split} & ^{1}\text{Horizontal}: 2.9^{\circ} (\text{TELE}) - 58^{\circ} (\text{WIDE}), \text{Vertical}: 2.2^{\circ} (\text{TELE}) - 44^{\circ} (\text{WIDE}) \\ & 1:1.6 & (\text{WIDE}) - 1:4.5 & (\text{TELE}) \\ & 1.5 & (\text{50-1}) / 16 & \text{inches} \right) - \infty \\ & \text{Wide}: 51.9 & \text{M} / 170.3 \text{ ft}, \text{Tele}: 1293.8 & \text{M} / 4244.9 \text{ ft} \\ & \text{Wide}: 20.8 & \text{M} & 68.1 \text{ ft}, \text{Tele}: 517.5 & \text{M} & 1697.9 \text{ ft} \\ & \text{Wide}: 0.2 & \text{M} & 163.1 \text{ ft}, \text{Tele}: 517.5 & \text{M} & 1697.9 \text{ ft} \\ & \text{Wide}: 5.2 & \text{M} & 163.1 \text{ ft}, \text{Tele}: 129.4 & \text{M} & 424.5 \text{ ft} \\ & \text{Ambarella} & \text{CV25M} \\ & \text{Horizontal}: 360^{\circ} \text{ fndless Panning}, \text{Vertical}: -15 \text{ to} +195^{\circ}, \text{Yaw}: 0^{\circ} \\ & 360^{\circ} \text{ Endless Panning} \\ & \text{Manual: Approx. } 0.065^{\circ}/\text{s} - 150^{\circ}/\text{s} \\ & \text{Preset: Up to approx. 500^{\circ}/\text{s} \\ & \text{Operational} & -15 - +195^{\circ} \\ & \text{Manual: Approx. } 0.065^{\circ}/\text{s} - 150^{\circ}/\text{s} \\ & \text{Preset: Up to approx. 500^{\circ}/\text{s} \\ & Preset: Up to approx.$  |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br>n Chip (50C)<br>Angle<br>Panning Range<br>Panning Speed<br>Tilting Range<br>Tilting Speed  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1: 1.6 (WIDE) - 1: 4.5 (TELE)<br>1.5 m (50-1/16 inches) - ∞<br>Wide: 51.9 m / 170.3 ft, Tele: 129.8 m / 4244.9 ft<br>Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 10.4 m / 34.1 ft, Tele: 528.8 m / 849.0 ft<br>Wide: 52.0 m / 17.0 ft, Tele: 129.4 m / 424.5 ft<br>Ambarella CV25M<br>Horizontal: 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°<br>360° Endless Panning<br>Manual: Approx. 0.065° /s - 150° /s<br>Preset: Up to approx. 500° /s<br>Operational -15 - +195°<br>Annual: Approx. 0.065° /s -150° /s<br>Preset: Up to approx. 500° /s (PoE+), Up to approx. 350° /s (DC12 V POE)  |  |  |
| System o<br>Adjusting                               | Focus range<br>Detect (25ppm / 8ppf)<br>Observe (62.5ppm / 19ppf)<br>Recognize (125ppm / 38ppf)<br>Identify (250ppm / 76ppf)<br>n Chip (SoC)<br>n Chip (SoC)<br>Angle<br>Panning Range<br>Panning Speed<br>Tilting Range<br>Tilting Speed<br>Preset Positions  | $\label{eq:second} \begin{split} & ^{1}\text{Horizontal}: 2.9^{\circ} (\text{TELE}) - 58^{\circ} (\text{WIDE}), \text{Vertical}: 2.2^{\circ} (\text{TELE}) - 44^{\circ} (\text{WIDE}) \\ & 1:1.6 & (\text{WIDE}) - 1:4.5 & (\text{TELE}) \\ & 1.5 & (\text{50-1}) / 16 & \text{inches} \right) - \infty \\ & \text{Wide}: 51.9 & \text{M} / 170.3 \text{ ft}, \text{Tele}: 1293.8 & \text{M} / 4244.9 \text{ ft} \\ & \text{Wide}: 20.8 & \text{M} & 68.1 \text{ ft}, \text{Tele}: 517.5 & \text{M} & 1697.9 \text{ ft} \\ & \text{Wide}: 0.2 & \text{M} & 163.1 \text{ ft}, \text{Tele}: 517.5 & \text{M} & 1697.9 \text{ ft} \\ & \text{Wide}: 5.2 & \text{M} & 163.1 \text{ ft}, \text{Tele}: 129.4 & \text{M} & 424.5 \text{ ft} \\ & \text{Ambarella} & \text{CV25M} \\ & \text{Horizontal}: 360^{\circ} \text{ fndless Panning}, \text{Vertical}: -15 \text{ to} +195^{\circ}, \text{Yaw}: 0^{\circ} \\ & 360^{\circ} \text{ Endless Panning} \\ & \text{Manual: Approx. } 0.065^{\circ}/\text{s} - 150^{\circ}/\text{s} \\ & \text{Preset: Up to approx. 500^{\circ}/\text{s} \\ & \text{Operational} & -15 - +195^{\circ} \\ & \text{Manual: Approx. } 0.065^{\circ}/\text{s} - 150^{\circ}/\text{s} \\ & \text{Preset: Up to approx. 500^{\circ}/\text{s} \\ & Preset: Up to approx.$  |  |  |
| System o<br>Adjusting<br>Pan/tilt                   | Focus range Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (50C) angle Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return   | $\label{eq:second} \begin{array}{l} ^{1}\mbox{Horizontal}: 2.9^{\circ} (\mbox{TELE}) - 58^{\circ} (\mbox{WIDE}), \mbox{Vertical}: 2.2^{\circ} (\mbox{TELE}) - 44^{\circ} (\mbox{WIDE}) \\ 1: 1.6 (\mbox{WIDE}) - 1: 4.5 (\mbox{TELE}) \\ 1.5 m (50-1)(6 \mbox{inches}) - \infty \\ \hline \\ \mbox{Wide}: 51.9 m (170.3 \mbox{ft}, \mbox{Tele}: 129.8 m / 4244.9 \mbox{ft} \\ \hline \\ \mbox{Wide}: 52.8 m / 68.1 \mbox{ft}, \mbox{Tele}: 517.5 m / 1697.9 \mbox{ft} \\ \hline \\ \mbox{Wide}: 52.8 m / 68.1 \mbox{ft}, \mbox{Tele}: 517.5 m / 1697.9 \mbox{ft} \\ \hline \\ \mbox{Wide}: 52.8 m / 68.1 \mbox{ft}, \mbox{Tele}: 517.5 m / 1697.9 \mbox{ft} \\ \hline \\ \mbox{Wide}: 52.0 m / 17.0 \mbox{ft}, \mbox{Tele}: 517.5 m / 1697.9 \mbox{ft} \\ \hline \\ \mbox{Wide}: 52.0 m / 17.0 \mbox{ft}, \mbox{Tele}: 512.9 \mbox{ft} \\ \mbox{Wide}: 52.0 \mbox{mod} \\ \mbox{Horizontal}: 360^{\circ} \mbox{Endless Panning} \\ \mbox{Morall}: 360^{\circ} \mbox{Endless Panning} \\ \mbox{Manual}: \mbox{Approx}. 0.065^{\circ}/s - 150^{\circ}/s \\ \mbox{Preset: Up to approx}. 500^{\circ}/s \\ \mbox{Operational} -15 - +195^{\circ} \\ \mbox{Manual}: \mbox{Approx}. 0.065^{\circ}/s - 510^{\circ}/s \\ \mbox{Preset: Up to approx}. 500^{\circ}/s (\mbox{PCE}), \mbox{Up to approx}. 350^{\circ}/s (\mbox{DC12 V POE}) \\ \mbox{256 positions} \\ \mbox{Auto pan / Preset sequence/ Patrol} \\ \mbox{10 s/} 20 \mbox{s/} 30 \mbox{min}/ 30 \mbox{min}/ 60 \mbox{min} \\ \end{tabular}$  |  |  |
| System o<br>Adjusting<br>Pan/tilt                   | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) angle Panning Kange Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Camera Control  | eq:space-   |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser        | Focus range Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (50C) angle Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return   | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)           1:1.6 (WIDE) - 1: 4.5 (TELE)           1:5.m (50-1/16 inches) - ∞           Wide: 51.9m / 170.3 ft, Tele: 129.3.8 m / 4244.9 ft           Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft           Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft           Wide: 52.8 m / 34.1 ft, Tele: 528.8 m / 849.0 ft           Wide: 52.0 m / 17.0 ft, Tele: 129.4 m / 424.5 ft           Ambarella CV25M           Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°           360° Endless Panning           Manual: Approx. 0.065°/s - 150°/s           Preset: Up to approx. 500°/s           Operational - 15 - +195°           Manual: Approx. 0.065°/s -150°/s           Preset: Up to approx. 500°/s (PoE+), Up to approx. 350° /s (DC12 V PoE)           256 positions           Auto pan / Preset sequence/ Patrol           10 s/ 20 s/ 30 s/1 mini / 2 min / 3 min / 5 min / 10 min / 20 min / 30 min / 60 min           Brightness, AUX On / Off           Mic (Line) Input : On / Off  |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser        | Focus range Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) a Chip (50C) a Angle Panning Range Panning Speed Tilting Range Tilting Speed Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio  | eq:space-   |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser        | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) ang Range Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)         1: 1.6 (WIDE) - 1: 4.5 (TELE)         1: 1.6 (WIDE) - 1: 4.5 (TELE)         1: 1.5 m (50-1)/16 inches) - ∞         Wide: 51.9 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft         Wide: 52.0 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft         Wide: 0.2 n / 64.1 ft, Tele: 517.5 m / 1697.9 ft         Wide: 0.2 n / 9.4 1, ft, Tele: 258.8 m / 849.0 ft         Wide: 0.2 n / 9.4 1, ft, Tele: 258.8 m / 849.0 ft         Wide: 0.2 n / 9.4 1, ft, Tele: 258.8 m / 849.0 ft         Wide: 0.2 n / 9.4 1, ft, Tele: 258.8 m / 849.0 ft         Wide: 0.2 n / 9.4 1, ft, Tele: 258.8 m / 849.0 ft         Wide: 0.2 n / 70.0 ft, Tele: 129.4 m / 424.5 ft         Ambarella CV25M         Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°         360° Endless Panning         Manual: Approx. 0.065°/s - 150°/s         Preset: Up to approx. 500° s (POE+). Up to approx. 350° s (DC12 V POE)         256 positions         Auto pan/ Preset sequence/ Patrol         10 s/2 0s j/3 0s j 1 min/2 min/3 min / 5 min/10 min/20 min/60 min         Brightness, AUX On / Off         Mic (Line) Input : On / Off         Mid (Line) Input : On / Off         Molu atjustment : Low / Middle / High         Autio panex, AUX On / Off         Mic (Line) Input : On / Off  |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser        | Focus range Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) a Chip (50C) a Angle Panning Range Panning Speed Tilting Range Tilting Speed Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio  | eq:space-   |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) ang Range Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)         1: 1.6 (WIDE) - 1: 4.5 (TELE)         1: 1.6 (WIDE) - 1: 4.5 (TELE)         1: 1.5 m (50-1)/16 inches) - ∞         Wide: 51.9 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft         Wide: 52.0 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft         Wide: 0.2 n / 64.1 ft, Tele: 517.5 m / 1697.9 ft         Wide: 0.2 n / 9.4 1, ft, Tele: 258.8 m / 849.0 ft         Wide: 0.2 n / 9.4 1, ft, Tele: 258.8 m / 849.0 ft         Wide: 0.2 n / 9.4 1, ft, Tele: 258.8 m / 849.0 ft         Wide: 0.2 n / 9.4 1, ft, Tele: 258.8 m / 849.0 ft         Wide: 0.2 n / 9.4 1, ft, Tele: 258.8 m / 849.0 ft         Wide: 0.2 n / 70.0 ft, Tele: 129.4 m / 424.5 ft         Ambarella CV25M         Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°         360° Endless Panning         Manual: Approx. 0.065°/s - 150°/s         Preset: Up to approx. 500° s (POE+). Up to approx. 350° s (DC12 V POE)         256 positions         Auto pan/ Preset sequence/ Patrol         10 s/2 0s j/3 0s j 1 min/2 min/3 min / 5 min/10 min/20 min/60 min         Brightness, AUX On / Off         Mic (Line) Input : On / Off         Mid (Line) Input : On / Off         Molu atjustment : Low / Middle / High         Autio panex, AUX On / Off         Mic (Line) Input : On / Off  |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) n Chip (S | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1: 1.6 (WIDE) - 1: 4.5 (TELE)<br>1.5 m (50-1/16 inches) - $\infty$<br>Wide: 51.9m (70.3 ft, Tele: 129.3 m / 4244.9 ft<br>Wide: 20.8 m / 63.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 10.4 m / 34.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 52.m / 17.0 ft, Tele: 129.4 m / 424.5 ft<br>Ambarella CV25M<br>Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°<br>360° Endless Panning<br>Manual: Approx. 0.065°/s - 150°/s<br>Preset: Up to approx. 500°/s<br>Operational -15 - +195°<br>Manual: Approx. 0.065°/s -150°/s<br>Preset: Up to approx. 500°/s<br>Operational -15 - +195°<br>Manual: Approx. 0.065°/s -150°/s<br>Preset: Up to approx. 500°/s (P0E+), Up to approx. 350°/s (DC12 V P0E)<br>256 positions<br>Auto pan / Preset sequence/ Patrol<br>10 s/ 20 s/ 30 s/ 1 min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 30 min/ 60 min<br>Brightness, AUX On / Off<br>Wic (Line) Iput : On / Off<br>Volume adjustment : Low / Middle / High<br>English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese<br>Microsoft Edge, Firefox, Google Chrome<br>108ase-T1 / 1008ase-TX, R445 connectro   |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser        | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) ang Range Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language Browser <sup>3</sup> Network IF Resolution   | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1: 1.6 (WIDE) - 1: 4.5 (TELE)<br>1: 1.5 m (50-1)16 inches) - ∞<br>Wide: 51.9 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft<br>Wide: 0.2 n m / 68.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 0.2 n m / 68.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 0.2 n m / 64.1 ft, Tele: 518.8 m / 849.0 ft<br>Wide: 0.2 m / 17.0 ft, Tele: 129.4 m / 424.5 ft<br>Ambarella CV25M<br>Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°<br>360° Endless Panning<br>Manual: Approx. 0.065° /s - 150° /s<br>Preset: Up to approx. 500° /s<br>Operational -15 - +195°<br>Manual: Approx. 0.065° /s -150° /s<br>Preset: Up to approx. 500° /s<br>Auto pan/ Prest sequence/ Patrol<br>10 s/ 20 s/ 30 s/ 1min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 60 min<br>Brightness, AUX On / Off<br>Wic Line) Input : On / Off Volume adjustment : Low / Middle / High<br>Audio Output : On / Off Volume adjustment : Low / Middle / High<br>Audio Output : On / Off Volume adjustment : Low / Middle / High<br>English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Iapanese<br>Microsoft Edge, Firefox, Google Chrome<br>108ase-17 / 1008ase-17x, RJ45 connector<br>16 : <b>9 mode (60 fs mode)]</b> <sup>*2</sup> , 16 : <b>9 mode (30 fs mode)]</b> ,  |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Focus range Detect (25ppm / 8pf) Observe (62.5ppm / 19pf) Recognize (125ppm / 38pf) Identify (250ppm / 76ppf) n Chip (50C) a Angle Panning Range Panning Speed Tilting Range Tilting Speed Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language Browser'3 Network IF  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)           1: 1.6 (WIDE) - 1: 4.5 (TELE)           1.5.m (50-1/16 inches) - ∞           Wide: 51.9m / 170.3 ft, Tele: 129.3 m / 4244.9 ft           Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft           Wide: 5.2 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft           Wide: 0.4 m / 34.1 ft, Tele: 517.5 m / 1697.9 ft           Wide: 0.5 m / 170.0 ft, Tele: 129.4 m / 424.5 ft           Ambarella CV25M           Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°           360° Endless Panning           Manual: Approx. 0.065° /s - 150° /s           Preset: Up to approx. 500° /s           Operational -15 - +195°           Manual: Approx. 0.065° /s -150° /s           Preset: Up to approx. 500° /s (PoE+). Up to approx. 350° /s (DC12 V PoE)           256 positions           Auto pan/ Preset sequence/ Patrol           10 s/ 20 s/ 30 s/ 1 min/ 2 min/ 3 min/ 10 min/ 20 min/ 30 min/ 60 min           Brightness, AuX On / Off           Mic (Line) Input : On / O   |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) ang Range Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language Browser <sup>3</sup> Network IF Resolution   | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1: 1.6 (WIDE) - 1: 4.5 (TELE)<br>1.5 m (50-1/16 inches) - $\infty$<br>Wide: 51.9 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft<br>Wide: 52.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 10.4 m / 34.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 52.m / 17.0 ft, Tele: 129.4 m / 424.5 ft<br>Ambarella CV25M<br>Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°<br>360° Endless Panning<br>Manual: Approx. 0.065°/s - 150°/s<br>Preset: Up to approx. 500°/s<br>Operational - 15 - +195°<br>Manual: Approx. 0.065°/s -150°/s<br>Preset: Up to approx. 500°/s<br>Operational - 15 - +195°<br>Manual: Approx. 0.065°/s -150°/s<br>Preset: Up to approx. 500°/s (P0E+), Up to approx. 350°/s (DC12 V P0E)<br>256 positions<br>Auto pan / Preset sequence/ Patrol<br>10 s/ 20 s/ 30 s/ 1 min / 2 min / 3 min / 5 min / 10 min / 20 min / 60 min<br>Brightness, AUX On / Off<br>Wic (Line) Input : On / Off Volume adjustment : Low / Middle / High<br>Audio Output : On / Off Volume adjustment : Low / Middle / High<br>English, Italian, French, German, Spansh, Portuguese, Russian, Chinese, Iapanese<br>Microsoft Edge, Firefox, Google Chrome<br>108ase-T / 1008ase-TX, RI45 connector<br><b>[16 : 9 mode (60 fps mode)]</b> <sup>12</sup> , <b>[16 : 9 mode (23 fps mode)]</b> ,<br><b>[16 : 9 mode (60 fps mode)]</b> <sup>12</sup> , <b>[16 : 9 mode (25 fps mode)]</b>   |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) ang Range Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language Browser <sup>3</sup> Network IF Resolution   | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)           1: 1.6 (WIDE) - 1: 4.5 (TELE)           1: 1.5 m (50-1)/16 inches) - ∞           Wide: 51.9 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft           Wide: 02.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft           Wide: 0.5 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft           Wide: 0.5 m / 180.7 ft, Tele: 129.4 m / 424.5 ft           Ambarella CV25M           Horizontal : 500° fnolless Panning, Vertical : -15 to +195°, Yaw : 0°           360° Endless Panning           Manual: Approx. 0.005°/s - 150°/s           Preset: Up to approx. 500°/s           Operational - 15 - +195°           Manual: Approx. 0.005°/s - 150°/s           Preset: Up to approx. 500°/s           Operational -15 - +195°           Manual: Approx. 0.005°/s - 150°/s           Preset: Up to approx. 500°/s (DCE+), Up to approx. 350°/s (DCI2 V POE)           256 positions           Auto pan/ Preset sequence/ Patrol           10 s/ 20 s/ 30 s/ 1 min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 30 min/ 60 min           Brightness, AUX On / Off           Mcico Unput : On / Off           Midel p High           English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese           Microsoft Edge, Firefox, Google Chrome           108ase-17 / 100Base-17 / 100Base-17 / 100Base-17 / 100B  |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) ang Range Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language Browser <sup>3</sup> Network IF Resolution   | eq:space-   |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) ang Range Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language Browser <sup>3</sup> Network IF Resolution   | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)           1: 1.6 (WIDE) - 1: 4.5 (TELE)           1: 1.5 m (50-1)/16 inches) - ∞           Wide: 51.9 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft           Wide: 02.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft           Wide: 0.5 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft           Wide: 0.5 m / 180.7 ft, Tele: 129.4 m / 424.5 ft           Ambarella CV25M           Horizontal : 500° fnolless Panning, Vertical : -15 to +195°, Yaw : 0°           360° Endless Panning           Manual: Approx. 0.005°/s - 150°/s           Preset: Up to approx. 500°/s           Operational - 15 - +195°           Manual: Approx. 0.005°/s - 150°/s           Preset: Up to approx. 500°/s           Operational -15 - +195°           Manual: Approx. 0.005°/s - 150°/s           Preset: Up to approx. 500°/s (DCE+), Up to approx. 350°/s (DCI2 V POE)           256 positions           Auto pan/ Preset sequence/ Patrol           10 s/ 20 s/ 30 s/ 1 min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 30 min/ 60 min           Brightness, AUX On / Off           Mcico Unput : On / Off           Midel p High           English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese           Microsoft Edge, Firefox, Google Chrome           108ase-17 / 100Base-17 / 100Base-17 / 100Base-17 / 100B  |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) ang Range Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language Browser <sup>3</sup> Network IF Resolution   | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)<br>1: 1.6 (WIDE) - 1: 4.5 (TELE)<br>1: 1.5 m (50-1/16 inches) - $\infty$<br>Wide: 51.9 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft<br>Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft<br>Wide: 52.m / 17.0 ft, Tele: 129.4 m / 424.5 ft<br>Ambarella CV25M<br>Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°<br>360° Endless Panning<br>Manual: Approx. 0.065°/s - 150°/S<br>Preset: Up to approx. 500°/s<br>Operational - 15 - +195°<br>Manual: Approx. 0.065°/s -150°/S<br>Preset: Up to approx. 500°/s<br>Operational - 15 - +195°<br>Manual: Approx. 0.065°/s -150°/S<br>Preset: Up to approx. 500°/s (P0E+), Up to approx. 350°/s (DC12 V P0E)<br>256 positions<br>Auto pan / Preset sequence/ Patrol<br>10 s/ 20 s/ 30 s/ 1 min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 30 min/ 60 min<br>Brightness, AUX On / Off<br>Wic (Line) Input : On / Off Volume adjustment : Low / Middle / High<br>Audio Output : On / Off Volume adjustment : Low / Middle / High<br>English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Iapanese<br>Microsoft Edge, Firefox, Google Chrome<br>108ase-T / 1008ase-TX, RI45 connector<br><b>16</b> 6: <b>9 mode (60 fps mode)</b> <sup>12</sup> , <b>1</b> ft 6: <b>9 mode (25 fps mode)</b> ]<br><b>1</b> 202x1080, 1280x720, 640x360, 320x180<br><b>[4 : 3 mode (13 fps mode)</b> ], <b>[4 : 3 mode (25 fps mode)</b> ]  |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) n Chip (S | $\label{eq:second} \begin{array}{l} \label{eq:second} \begin{tabular}{lllllllllllllllllllllllllllllllllll$  |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) angle Panning Kange Panning Speed Tilting Range Tilting Range Tilting Speed Freset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language Browser <sup>3</sup> Network IF Resolution H.265/ H.264/ JPEG (MJPEG) H.265/ Transmission Mode   | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)         1: 1.6 (WIDE) - 1: 4.5 (TELE)         1: 5.m (50-1)/16 inches) - ∞         Wide: 51.9m / 170.3 ft, Tele: 129.3.8 m / 4244.9 ft         Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft         Wide: 5.2 m / 170.3 ft, Tele: 129.3.8 m / 4244.9 ft         Wide: 0.4 m / 64.1 ft, Tele: 517.5 m / 1697.9 ft         Wide: 0.5 m / 170.0 ft, Tele: 129.4 m / 424.5 ft         Ambarella CV25M         Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°         360° Endless Panning         Manual: Approx. 0.065° /s - 150° /s         Preset: Up to approx. 500° /s (POE+). Up to approx. 350° /s (DC12 V POE)         256 positions         Auto pan/ Preset sequence/ Patrol         10 s/ 20 s/ 3 0 s/1 min/ 2 min/ 3 min / 5 min / 10 min / 20 min / 60 min         Brightness, AUX On / Off         Mc (Line) Input : On / Off Volume adjustment : Low / Middle / High         Audio Output : On / Off Volume adjustment : Low / Middle / High         Audio Output : On / Off Volume adjustment : Low / Middle / High         Audio Soft Edge, Firefox, Google Chrome         10Base-T / 100Base-T / X, R45 connector         10F s mode (60 fps mode)] <sup>7</sup> 2, [16 : 9 mode (30 fps mode)],         16 : 9 mode (50 fps mode)] <sup>7</sup> 2, [16 : 9 mode (30 fps mode)]         17 : 3 mode (15 ofps mode)]  |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range         Detect (25ppm / 8ppf)         Observe (62.5ppm / 19ppf)         Recognize (125ppm / 38ppf)         Identify (250ppm / 76ppf) <b>n Chip (SoC) a Angle</b> Panning Range         Panning Speed         Tilting Range         Tilting Speed         Self Return         Camera Control         Auto Mode         Self Return         Camera Control         Audio         GUI / Setup Menu Language         Browser' <sup>3</sup> Network IF         Resolution         H.265/ H.264/ JPEG (MJPEG)         H.265/ Transmission Mode         H.265/ Transmission Type  | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)           1: 1.6 (WIDE) - 1: 4.5 (TELE)           1: 5.m (50-1)/16 inches) - ∞           Wide: 51.9m / 170.3 ft, Tele: 129.3.8 m / 4244.9 ft           Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft           Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft           Wide: 52.8 m / 84.0 ft           Wide: 52.8 m / 84.0 ft           Wide: 52.8 m / 84.0 ft           Wide: 52.8 m / 70.0 ft, Tele: 129.4 m / 424.5 ft           Ambarella CV25M           Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°           360° Endless Panning           Manual: Approx. 0.065°/s - 150°/s           Preset: Up to approx. 500°/s           Operational - 15 - +195°           Manual: Approx. 0.065°/s - 150°/s           Preset: Up to approx. 500°/s (PoE+), Up to approx. 350°/s (DC12 V PoE)           256 positions           Auto pan/ Preset sequence/ Patrol           10 s / 20 s / 30 s / 1 min / 2 min / 3 min / 5 min / 10 min / 20 min / 30 min / 60 min           Brightness, AUX On / Off           Kic (Line) Input : On / Off           Nolume adjustment : Low / Middle / High           Audio Output : On / Off           IG : 9 mode (60 fps mode)] <sup>*</sup> 2 , [I6 : 9 mode (30 fps mode)],           If : 9 mode (60 fps mode)] <sup>*</sup> 2 , [I6 : 9 mode (25 fps mode)]  |  |  |
| System o<br>Adjusting<br>Pan/tilt<br>Browser<br>GUI | Focus range Focus range Detect (25ppm / 8ppf) Observe (62.5ppm / 19ppf) Recognize (125ppm / 38ppf) Identify (250ppm / 76ppf) n Chip (SoC) angle Panning Kange Panning Speed Tilting Range Tilting Range Tilting Speed Freset Positions Auto Mode Self Return Camera Control Audio GUI / Setup Menu Language Browser <sup>3</sup> Network IF Resolution H.265/ H.264/ JPEG (MJPEG) H.265/ Transmission Mode   | 'Horizontal : 2.9° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)         1: 1.6 (WIDE) - 1: 4.5 (TELE)         1: 5.m (50-1/16 inches) - ∞         Wide: 51.9 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft         Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft         Wide: 52.0 m / 170.3 ft, Tele: 129.3 m / 4244.9 ft         Wide: 0.4 m / 34.1 ft, Tele: 518.8 m / 424.5 ft         Ambarella CV25M         Horizontal : 360° Endless Panning, Vertical : -15 to +195°, Yaw : 0°         360° Endless Panning         Manual: Approx. 0.065° /s - 150° /s         Preset: Up to approx. 500° /s         Operational -15 - +195°         Manual: Approx. 0.065° /s -150° /s         Preset: Up to approx. 500° /s (PoE+). Up to approx. 350° /s (DC12 V PoE)         256 positions         Auto pan/ Preset sequence/ Patrol         10 s/2 0.3 / 1 min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 30 min / 60 min         Brightness, AUX On / Off         Miccusoft Edge, Firefox, Google Chrome         10Base-T / 100Base-T / XR45 connector         [16 : 9 mode (60 fps mode)] <sup>1</sup> c , [16 : 9 mode (30 fps mode)],         [16 : 9 mode (50 fps mode)] <sup>2</sup> , [16 : 9 mode (30 fps mode)],         [16 : 9 mode (50 fps mode)] <sup>2</sup> , [16 : 9 mode (25 fps mode)]         1920x0800, 1280x720, 640x803, 320x180         [1 : 3 mode (15 fps mode)], [4 : 3 mode (25 fps mode)]  |  |  |

| Network | 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 <sup>*6</sup> : 64 kbps / 96 kbps / 128 kbps  |
|         | Audio transmission mode       | Off / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duples   |
|         | 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, LLD |
|         |                               |  |
|         |                               | 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,   |
|         | N (C) 11                      | IEEE 802.1X, DiffServ, SRTP, SFTP, MQTT, NTCIP   |
|         | 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<br>Memory Card   | H.265 / H.264 recording :<br>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 <sup>®</sup> Profile    | G/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/  | Audio input                   | ø3.5 mm stereo mini jack   |
| Output  | For microphone input :        |  |
|         |                               | (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 :              |  |
|         | 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) (x   |
| 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              | DC12 V, PoE (IEEE802.3af), PoE+ (IEEE802.3at)  |
|         | Power Consumption             | 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 / Approx18.4 W (Class 4 device)   |
|         | Ambient Operating             | -30 °C to +55 °C (-22 °F to +131 °F)   |
|         | Temperature                   | (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)   |
|         | Ambient Operating Humidity    |  |
|         | Anti-Condensation System      | Temish element   |
|         | Water and Dust Resistance     | IP66, IEC60529 measuring standard compatible, Type 4X(UL50E), NEMA 4X compliar   |
|         | 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, Clear (G: Smoke)   |

<sup>1</sup> Converted value
<sup>2</sup> When 60 fbys or 50 fps is selected, the Super Dynamic function is automatically set to off.
<sup>3</sup> For information on the operation verification of the supported web browsers, refer to our support website <Control No.: C0132>.
<sup>4</sup> Used by super resolution techniques
<sup>5</sup> Transmission for 4 streams can be individually set.
<sup>6</sup> When recording audio on an microSD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity).

### Appearance



With Attachment plate & Attachment cover

Unit : mm (inches)

### **Optional Accessories**

| N           | Mount Bracket / Other   |   |   |   |   |   |  |  |
|-------------|---|---|---|---|---|---|--|--|
|             | WALL  |   | POLE  | CORNER  | HANGING   |   |  |  |
| combination | 1   | 2   | 1   | 1   | 1   | 2   |  |  |
|             | Wall Mount Bracket<br>PWM40W<br>(White)                             | Wall Mount Bracket<br>WV-QWL500-W<br>(White)        | Pole Mount Bracket<br>PAPM4W<br>(White)                             | Corner Mount Bracket<br>PACA4W<br>(White)                           | Ceiling Mount Bracket<br>WV-QCL501-W<br>(White) | Ceiling Mount Bracket<br>WV-QCL101-W '1<br>(White)<br>*For indoor<br>installation only. |  |  |
|             | Mount Bracket<br>WV-QSR501F1-W<br>(White,<br>ANSI Female<br>thread) | Adapter Box<br>WV-QJB500-W<br>(White)<br>If needed. | Wall Mount Bracket<br>PWM40W<br>(White)                             | Wall Mount Bracket<br>PWM40W<br>(White)                             | Mount Bracket<br>WV-QSR501-W<br>(White)         |   |  |  |
|             |   |   | Mount Bracket<br>WV-QSR501F1-W<br>(White,<br>ANSI Female<br>thread) | Mount Bracket<br>WV-QSR501F1-W<br>(White,<br>ANSI Female<br>thread) |   |   |  |  |

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

Cable

|             |  | CEILING   | OTHER                                  |   |   |  |
|-------------|--|---|--|---|---|--|
|             | 1                                      | 2   | 3                                      | 1   |   |  |
| combination | Base Bracket<br>WV-QJB501-W<br>(White) | Ceiling Mount Bracket<br>(Embedded)<br>WV-QEM504-W<br>(White)<br>*For indoor<br>installation<br>only. | Base bracket<br>WV-QJB504-W<br>(White) | 3rd Party Pipe<br>(Male or Female type)                       |   |  |
|             |  |   |  | Mount Bracket<br>WV-QSR501F1-W<br>(White, ANSI Female thread) | 3 |  |
|             |  |   |  | WV-QSR501M1-W<br>(White, ANSI Male thread)                    |   |  |

#### Dome Cover



#### I/O Cable WV-QCA501A WV-QCA501APK

\*WV-QCA501APK is package of 10 cables.

\*The color of the grommet rubber may differ depending on the production time, but the performance and mounting method will not change.

- Trademarks and registered trademarks GlobalSign and the GlobalSign Logo are registered trademarks of GMO GrobalSign K.K.
- 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.

- 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.



i-PRO Co., Ltd. https://i-pro.com/ (2A-343BL)