

WV-X86530-Z2-1

3 x 5MP Outdoor Multi-directional + 2MP(1080p) 21x PTZ Network Camera with AI Engine

Smallest in the industry*, Multi-directional + PTZ Camera with AI Engine

*Outdoor model only, As of February 2023, based on i-PRO own research



- 3 x 5MP multi-directional camera + 2MP 21x PTZ camera
- Discreet design
- Up to 6 Edge AI analytic apps
- Al auto tracking
- No calibration required
- Pan/Tilt speed up to 500 deg/s
- IP66, IP67, IK10 rated
- Bulit-in FIPS 140-2 Level 3 certified SecureElement
- NDAA compliant



















SPECIFICATIONS

| Camera | | |
|--|---|--|
| Image Sensor | <multi part=""> 3x 1/2.7 type CMOS image sensor <ptz part=""> 1/2.8 type CMOS image sensor</ptz></multi> | |
| Minimum Illumination | <pre><multi part=""> Color : 0.12 lx (30IRE,F2.0, 1/30 s), Color : 0.17 lx (50IRE,F2.0, 1/30 s), BW : 0.10 lx (50IRE,F2.0, 1/30 s) <ptz part=""> Color : 0.011 lx (30IRE,F1.6, 1/30 s), Color : 0.015 lx (50IRE,F1.6, 1/30 s), BW : 0.006 lx (50IRE,F1.6, 1/30 s)</ptz></multi></pre> | |
| White Balance | ATW1/ ATW2/ AWC | |
| Maximum shutter | <multi part=""> 15 fps mode: Max.1/10000s to Max.16/30s <ptz part=""> 60 fps mode: Max.1/4000s to Max.16/30s, 30 fps mode: Max.1/4000s to Max.16/30s, 15 fps mode: Max.1/4000s to Max.16/30s</ptz></multi> | |
| Intelligent Auto | On / Off | |
| Super Dynamic | <multi part=""> On / Off, The level can be set in the range of 0 to 31. <ptz part=""> On / Off, The level can be set in the range of 0 to 31.*1</ptz></multi> | |
| Dynamic Range | <multi part=""> 108 dB max. (Super Dynamic: On, Level: 31) <ptz part=""> 144 dB max. (Super Dynamic: On, Level: 31)</ptz></multi> | |
| Adaptive Black Stretch | The level can be set in the range of 0 to 255. | |
| Back Light Compensation/High Light Compensation | BLC (Back light compensation) / HLC (High light compensation) / Off (only when Super dynamic / Intelligent Auto : Off) | |
| Fog Compensation | On / Off (only when Intelligent auto / auto contrast adjust : Off) | |
| Maximum Gain (AGC) | The level can be set in the range of 0 to 11. | |
| Color/BW (ICR) | Off/On/Auto1(Normal)/Auto2(IR Light)/Auto3(SCC) | |
| IR LED Light | - | |
| Digital Noise Reduction | The level can be set in the range of 0 to 255. | |
| Panorama | - | |
| 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 | Selectable from Gunshot, Yell, Vehicle horn, Glass break | |
| Al Analytics | Al Video Motion Detection, Al Privacy Guard, Al Face Detection, Al People Detection, Al Vehicle Detection, Al Non mask Detection, Al Occupancy Detection, Al Scene Change Detection For details https://i-pro.com/global/en/surveillance/products/i-pro-ai-application 3rd party applications are also available. https://i-pro.com/global/en/surveillance/i-pro-application-platform/application-list | |
| Privacy Zone | <multi part=""> On / Off, Up to 8 zones available <ptz part=""> On / Off, Up to 32 zones available</ptz></multi> | |
| VIQS | <multi part=""> On / Off, Up to 8 zones available <ptz part=""> On / Off, Up to 8 zones available</ptz></multi> | |
| Image Rotation | Upside-down: On/Off | |
| Camera Title (OSD) | On/ Off, Up to 40 characters, Up to 2 Lines (alphanumeric characters, marks) | |
| Focus Adjustment | <multi part=""> - <ptz part=""> Auto focus</ptz></multi> | |

| Lens | | |
|---|---|--|
| Optical zoom | <multi part=""> 1x <ptz part=""> 21x (Motorized zoom / Motorized focus)</ptz></multi> | |
| Extra zoom | <multi part=""> max 4.0x (when resolution is 640x360) <ptz part=""> max 31x(when resolution is 1280x720)</ptz></multi> | |
| Focal length | <multi part=""> 3.2mm <ptz part=""> 4.0mm - 84.6mm {5/32inches - 3-11/32 inches}</ptz></multi> | |
| Angular Field of View | <multi part=""> Horizontal : 97 deg. / Vertical : 71 deg. <ptz part=""> Horizontal : 3.7 ° to 77 ° / Vertical : 2.2 ° to 44°</ptz></multi> | |
| Maximum Aperture Ratio | <multi part=""> 2 <ptz part=""> 1: 1.6 (WIDE) to 1: 4.5 (TELE)</ptz></multi> | |
| Focus range | <multi part=""> 1 m {3.28 ft} to ∞ <ptz part=""> 1.5 m {59-1/16 inches} to ∞</ptz></multi> | |
| DORI | | |
| Detect (25ppm / 8ppf) | <multi part=""> 45.3 m / 148.6 ft <ptz part=""> Wide: 48.3 m / 158.4 ft, Tele: 1188.9 m / 3900.5 ft</ptz></multi> | |
| Observe (62.5ppm / 19ppf) | <multi part=""> 18.1 m / 59.4 ft <ptz part=""> Wide: 19.3 m / 63.4 ft, Tele:475.5 m / 1560.2 ft</ptz></multi> | |
| Recognize (125ppm / 38ppf) | <multi part=""> 9.1 m / 29.7 ft <ptz part=""> Wide: 9.7 m / 31.7 ft, Tele: 237.8 m / 780.1 ft</ptz></multi> | |
| Identify (250ppm / 76ppf) | <multi part=""> 4.5 m / 14.9 ft <ptz part=""> Wide: 4.8 m / 15.8 ft, Tele: 118.9 m / 390.0 ft</ptz></multi> | |
| System on Chip (SoC) | | |
| System on Chip (SoC) | <multi part=""> Ambarella CV2 <ptz part=""> Ambarella CV25m</ptz></multi> | |
| Adjusting Angle | | |
| | | |
| Adjusting Angle | <pre><multi part=""> Camera 1, 2, 3 : Vertical: 40 ±7° (Adjust by vertical (TILT) angle) <ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195°/ Yaw : 0°</ptz></multi></pre> | |
| Adjusting Angle | <multi part=""> Camera 1, 2, 3 : Vertical: 40 ±7° (Adjust by vertical (TILT) angle) <ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195°/ Yaw : 0°</ptz></multi> | |
| | <ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195°/ Yaw : 0°</ptz> | |
| Adjusting Angle Pan /tilt | <pre><multi part=""> Camera 1, 2, 3 : Vertical: 40 ±7° (Adjust by vertical (TILT) angle) <ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195°/ Yaw : 0° 360 °Endless panning Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s</ptz></multi></pre> | |
| Adjusting Angle Pan /tilt Panning Range | <ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195° / Yaw : 0° 360 °Endless panning Manual : 0.065 °/s - 150°/s</ptz> | |
| Adjusting Angle Pan /tilt Panning Range Panning Speed | <ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195° / Yaw : 0° 360 °Endless panning Manual : 0.065 ° /s - 150° /s Preset : Up to 500 ° /s</ptz> | |
| Pan /tilt Panning Range Panning Speed Tilting Range | <ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195°/ Yaw : 0° 360 °Endless panning Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s Operational -15 - +195° Manual : 0.065 °/s - 150°/s</ptz> | |
| Adjusting Angle Pan /tilt Panning Range Panning Speed Tilting Range Tilting Speed | <ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195°/ Yaw : 0° 360 °Endless panning Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s Operational -15 - +195° Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s</ptz> | |
| Adjusting Angle Pan /tilt Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions | <ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195° / Yaw : 0° 360 °Endless panning Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s Operational -15 - +195° Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s 256 positions</ptz> | |
| Adjusting Angle Pan /tilt Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode | <ptz part=""> Horizontal: 360° Endless Panning / Vertical: -15 to +195°/ Yaw: 0° 360 °Endless panning Manual: 0.065 °/s - 150°/s Preset: Up to 500 °/s Operational -15 - +195° Manual: 0.065 °/s - 150°/s Preset: Up to 500 °/s 256 positions Auto track / Auto pan/ Preset sequence/ Patrol</ptz> | |
| Pan /tilt Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return | <ptz part=""> Horizontal: 360° Endless Panning / Vertical: -15 to +195°/ Yaw: 0° 360 °Endless panning Manual: 0.065 °/s - 150°/s Preset: Up to 500 °/s Operational -15 - +195° Manual: 0.065 °/s - 150°/s Preset: Up to 500 °/s 256 positions Auto track / Auto pan/ Preset sequence/ Patrol</ptz> | |
| Adjusting Angle Pan /tilt Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Browser GUI | <ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195°/ Yaw : 0° 360 °Endless panning Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s Operational -15 - +195° Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s 256 positions Auto track / 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</ptz> | |
| Pan /tilt Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Browser GUI Camera Control | <pre><ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195°/ Yaw : 0° 360 °Endless panning Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s Operational -15 - +195° Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s 256 positions Auto track / 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 Mic (Line) Input : On / Off , Volume adjustment : Low / Middle / High</ptz></pre> | |
| Adjusting Angle Pan /tilt Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Browser GUI Camera Control Audio | <pre><ptz part=""> Horizontal : 360° Endless Panning / Vertical : -15 to +195°/ Yaw : 0° 360 °Endless panning Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s Operational -15 - +195° Manual : 0.065 °/s - 150°/s Preset : Up to 500 °/s 256 positions Auto track / 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 Mic (Line) Input : On / Off , Volume adjustment : Low / Middle / High Audio Output : On / Off , Volume adjustment : Low / Middle / High</ptz></pre> | |
| Pan / tilt Panning Range Panning Speed Tilting Range Tilting Speed Preset Positions Auto Mode Self Return Browser GUI Camera Control Audio GUI / Setup Menu Language | PTZ Part> Horizontal: 360° Endless Panning / Vertical: -15 to +195° / Yaw: 0° 360 °Endless panning Manual: 0.065 °/s - 150°/s Preset: Up to 500 °/s Operational -15 - +195° Manual: 0.065 °/s - 150°/s Preset: Up to 500 °/s 256 positions Auto track / 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 Mic (Line) Input: On / Off, Volume adjustment: Low / Middle / High Audio Output: On / Off, Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese | |

| Resolution H.265/ H.264/ JPEG (MJPEG) | <pre><multi part=""> [4:3] (15fps mode)/[4:3] (12.5fps mode) 3072 x 2304*2, 2560x1920, 1280 x 960, VGA, QVGA [4:3] (15fps Quad mode)/[4:3] (12.5fps Quad mode) 3072 x 2304*2, 2560 x 1920, 1280 x 960, VGA [16:9] (15fps mode) / [16:9] (12.5fps mode) 3072 x 1728*2, 2560 x 1440, 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 [16:9] (15fps Quad mode)/[16:9] (12.5fps Quad mode) 3072 x 1728*2, 2560 x 1440, 1920 x 1080, 1280 x 720, 640 x 360 <ptz part=""> [16:9 mode (60 fps mode)][16:9 mode (30 fps mode)][16:9 mode (50 fps mode)][16:9 mode (25 fps mode)] 1920 x 1080, 1280 x 720, 640 x 360, 320 x 180 [4:3 mode (30 fps mode)][4:3 mode (25 fps mode)] 1280 x 960, VGA, QVGA [4:3 mode (15 fps mode)][4:3 mode (12.5 fps mode)] 2048 x 1536*2, 1280 x 960, VGA, QVGA</ptz></multi></pre> | |
|--|---|--|
| H.265/H.264 | [Transmission Mode] Constant bit rate / VBR / Frame rate / Best effort [Transmission Type] Unicast port (AUTO) / Unicast port (MANUAL) / Multicast | |
| JPEG | [Image Quality] 10 steps | |
| Smart Coding | GOP (Group of pictures) control : On (Frame rate control)* / On (Advanced)* / On (Mid) / On (Low) / Off *On (Frame rate control) and On (Advanced) are only available with H.265. Smart VIQS: On(High)/On(Low)/Off, Smart P-picture control: On/Off | |
| Audio Compression | G.726 (ADPCM) : 32 kbps/16 kbps, G.711 : 64 kbps, AAC-LC : 64kbps/96kbps/128kbps *3 | |
| 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 <control c0141="" no.:=""> *4, DiffServ, LLDP, MQTT</control> | |
| No. of Simultaneous Users | <multi part=""> 24 (Number of sessions that can connect to cameras at the same time)* Depends on network conditions <ptz part=""> 14 (Number of sessions that can connect to cameras at the same time)* Depends on network conditions</ptz></multi> | |
| Secure | FIPS 140-2 level 3 (NXP® EdgeLock® SE050F), Device Certificate GlobalSign® pre-installed, User authentication, Host authentication, HTTPS, 802.1X Support <control c0141="" no.:=""> *4, Alteration Detection</control> | |
| 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), AndroidTM terminals | |
| ONVIF® Profile | G / M / S / T | |
| Alarm | | |
| Alarm Source | 3 terminals input, VMD alarm, SCD alarm, Command alarm, Audio detection alarm | |
| Alarm Actions | SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, TCP alarm notification output | |
| Input/Output | | |
| Monitor Output (for Adjustment) | _ | |
| Audio input *5 | ø3.5 mm stereo mini jack For microphone input : Recommended applicable microphone : Plug-in power type (Sensitivity of microphone : $-51 \text{dB} \sim -38 \text{dB}$ (0 dB=1 V/Pa, 1 kHz)) Input impedance : Approx. 2 k Ω (unbalanced) Supply voltage : 2.5 V ±0.5 V, For line input : Input level: Approx. -10dBV | |
| Audio Output *5 | ø3.5 mm stereo mini jack (Audio output is monaural.) Output impedance: Approx. 600 Ω (unbalanced), Output level: −20 dBV | |
| External I/O Terminals *5 | 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 ClassA, EN55032 ClassA, EN55024 | |
| Power Source and Power Consumption | PoE++ (IEEE802.3bt compliant) | |
| Ambient Operating Temperature | -40 °C to +55 °C { -40 °F to 131 °F} (Power On range: -20 °C to +55 °C { -4 °F to 131°F}) Maximum temperature according to NEMA TS 2 (2.2.7) : 74 °C (165°F) | |
| Ambient Operating Humidity | 10 % to 100 % (no condensation) | |
| Anti-Condensation System | Temish element | |
| Water and Dust Resistance | IP67/IP66 (IEC 60529), Type 4X (UL50E), NEMA 4X compliant | |
| Shock Resistance | IK10 (IEC 62262) | |
| Other standard support | NEMA TS 2 (2.2.7-2.2.9) | |
| Dimensions | ø250 mm x 195 mm (H) | |
| Mass (approx.) | Approx. 3.8 kg | |
| Finish | Main body: Aluminum die cast, Black Outer fixing screws: Stainless steel (Corrosion-resistant treatment) Dome cover: PC resin, Clear | |

NOTES

- *1 When 60 fps or 50 fps is selected, the Super Dynamic function is automatically set to off.
- *2 Used by super resolution techniques.
- *3 When recording audio on a micro SD memory card, only use AAC-LC (Advanced Audio Coding Low Complexity).
- *4 "<Control No.: C****>" used in this document should be used to search for information on our technical information website (https://i-pro.com/global/en/surveillance/training-support/support/technical-information) and will guide you to the right information.
- *5 When using with them, WV-QCA501A cable is required.

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 usedonthe network.
- Masses and dimensions are approximate.
- Specifications are subject to change without notice.

Trademarks and registered trademarks

- iPad and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries. Android is a trademark of Google LLC.
- ONVIF is a trademark of ONVIF, Inc.
- All other trademarks identified herein are the property of their respective owners

©i-PRO Co., Ltd All rights reserved / January 2023



OPTIONAL ACCESSORIES

Select a compatible accessory Accessory Selector (i-pro.com)



WV-QDC502G Dome Cover



WV-QDC502C Dome Cover



WV-QSR508-B Mount Bracket



WV-QWL501-B Mount Bracket



WV-QPL500-B Mount Bracket



WV-QCN500-B Mount Bracket



WV-QCL501-B Mount Bracket



WV-QSR508F1-B Mount Bracket



WV-QCL101-B Mount Bracket



WV-QSR508F-B Mount Bracket



WV-QCL100-B Mount Bracket



WV-QSR508M-B Mount Bracket



WV-Q105A Mount Bracket



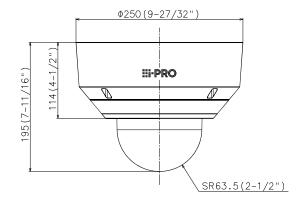
WV-QEM506-B Ceiling Mount Bracket

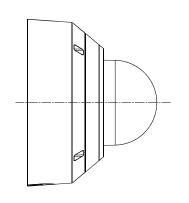


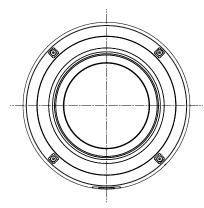
WV-QCA501A I/O Cable

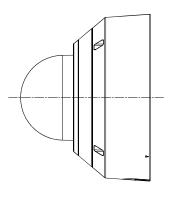


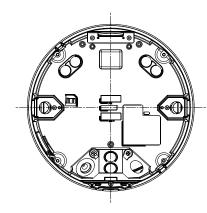
WV-QSR508M1-B Mount Bracket

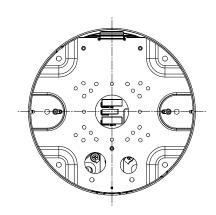




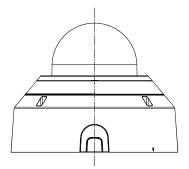








With attachment plate





| | 投影面積/Projected | area |
|---------------|-------------------------|------|
| 側面図/Side-view | 0.034 (m ²) | |

Mass : Approx. 3.8 kg {8,39 lbs} (When using the attachment plate)