

Industry thinnest* multi-sensor cameras with AI Engine •the thinnest : I-PRO own research as of February 2022 4x4K(33MP) IR Outdoor Multi-Sensor Network Camera with AI Engine

i-PRO releases 8 the industry thinnest multi-sensor cameras with AI Engine with lineup of 4MP/6MP/4K, 3eyes/4eyes with built-in IR LED. It is installed AI analytics applications which identify people and vehicles automatically, and users are able to start the latest surveillance technologies easily. It is designed to reduce installation time(thin and light weight) and continuous view assistance provides you 360/270-degree continuous images.

Key features

- The thinnest multi-sensor camera (3.5 inches/90 mm)

It can be fitted in not only outside, but it also is fitted in inside the facility.

(Low profile/Blends in seamlessly with environment)

Even though it is rated IK10, it achieves the light weight body.

- A variety kinds of AI Apps selection

It can install and use up to 4 different types of AI Apps all together. Using AI processor which identifies object as people or vehicle, it will reduce false alarm compared to conventional model. As result, it can be used many industries. Also, new multi-sensor has IR-LED function which will increase AI intruder detection accuracy in the low light environment.

- Easy installation
 - \cdot Just 1 LAN cable covers 4 directions.
 - \cdot Thin and hook architecture make easy installation
 - \cdot Continuous view assistance by using smartphone navigates you the best angle position.
 - · You can change angle by using motorized zoom after installation.*4MP model only
- High security

New multi-sensor camera has equipped FIPS 140-2 level3 certified hardware to upgrade its security standard. Combining pre-installing digital certificates issued by a third party organization (Global Sign) and this, we can declare i-PRO high security level to those who cares cyber security.

Key i-PRO Spec.

- 4 x 4K(33MP) 3840x2160 up to 15fps
- 360° coverage with one IP address
- Intelligent Auto (with AI Engine)
- Super Dynamic 120dB
- Color night vision (0.084 to 0.12 lx)
- Smart Coding (with AI Engine)
- Built-in 360° IR LED
- Continuous view assistance
- Wide range tilt angle adjustment mechanism
- ONVIF[®] Profile G / M / S / T *ONVIF is a trademark of ONVIF, Inc.
- FIPS 140-2 level3 certified

Industry examples

- Public safety (City / Highway toll / Parking gate)
- Transportation (Airport / Train / Subway)
- Education





::i·PRO

Specifications

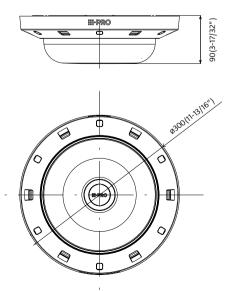
| Camera | Image Sensor | 4x 1/2.8 type CMOS image sensor | | |
|-----------------|---|--|--|--|
| | Minimum Illumination | Color : 0.084 lx (-G: 0.24 lx) {30IRE, F1.44, 1/30 s} *1 | | |
| | | Color: 0.12 lx (-G: 0.34 lx) {50IRE, F1.44, 1/30 s} | | |
| | | BW : 0.05 lx (-G: 0.14 lx) {50IRE, F1.44,1/30 s} | | |
| | | BW : 0 Ix {50IRE, F1.44, 1/30 s with IR LED} | | |
| | White Balance | ATW1 / ATW2 / AWC | | |
| | Maximum shutter | 15 fps mode: Max.1/10000s to Max.16/30s | | |
| | | 12.5 fps mode: Max.1/10000s to Max.16/25s | | |
| | Intelligent Auto | On / Off | | |
| | Super Dynamic Dynamic Range | On / Off, The level can be set in the range of 0 to 31. Max.120 dB (Super Dynamic : On, Level 31) | | |
| | | The level can be set in the range of 0 to 255. | | |
| | Adaptive Black Stretch Back light compensation / | BLC (Back light compensation) / HLC (High light compensation) / | | |
| | 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 (IR Light Off) / On (IR Light On) / Auto1(IR Light Off) / | | |
| | | Auto2(IR Light On) / Auto3(SCC) | | |
| | IR LED Light | High / Middle / Low / Off | | |
| | 5 | Maximum irradiation distance : | | |
| | | 40 m {Approx. 131 ft} / (-G): 30 m {Approx. 99 ft} (30IRE) *1 | | |
| | | 30 m {Approx. 99 ft} / (-G): 21 m {Approx. 69 ft} (50IRE) | | |
| | Digital Noise Reduction | The level can be set in the range of 0 to 255. | | |
| | Panorama | Panorama mode (H: 180 deg.) | | |
| | 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 | Selectable from Gunshot, Yell, Vehicle horn, Glass break | | |
| | Al Analytics | Yes | | |
| | Privacy Zone | On / Off, Up to 8 zones available | | |
| | VIQS | On / Off, Up to 8 zones available | | |
| | Image rotation ^{*2} | 0° (Off)/ 90°/ 180° (Upside-down)/ 270° | | |
| | Camera Title (OSD) | On / Off, Up to 40 characters, Up to 2 Lines (alphanumeric characters, marks) | | |
| | Focus Adjustment | - | | |
| Lens | Optical zoom | 1x | | |
| | Extra zoom | max 6x (when resolution is 640x360) | | |
| | Focal length Angular Field of View | 3.1 mm {1/8 inches} | | |
| | Maximum Aperture Ratio | Horizontal : 108°, Vertical : 56° 1 : 1.4 | | |
| | Focus range | 1 : 1.4 3 m {9.84 ft} - ∞ | | |
| DORI | Detect (25ppm / 8ppf) | 56.8 m / 186.4 ft | | |
| DOKI | Observe (62.5ppm / 19ppf) | | | |
| | Recognize (125ppm / 38ppf) | 11.4 m / 37.3 ft | | |
| | Identify (250ppm / 76ppf) | 5.7 m / 18.6 ft | | |
| System o | n Chip (SoC) | Ambarella CV2 | | |
| Adjusting | | Camera 1, 2, 3, 4: | | |
| riajaseini | , | Horizontal : ±125° (Adjust by horizontal (PAN) angle) | | |
| | | Vertical : +10° to +105° (Adjust by vertical (TILT) angle) | | |
| | | Yaw : ±90° (Adjust by azimuth (YAW) angle) | | |
| | | Twist : ±30° | | |
| | | *The above is the adjustable range of a single camera. | | |
| | | The adjustable range of each camera varies according to the positional | | |
| | | relationship with other cameras. | | |
| Browser | Camera Control | Brightness, AUX On / Off | | |
| GUI | Audio | Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High | | |
| | | Audio Output : On / Off Volume adjustment : Low / Middle / High | | |
| | GUI / Setup Menu Language | English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese | | |
| | Browser ^{*3} | Microsoft Edge, Firefox, Google Chrome | | |
| Network | | 10Base-T / 100Base-TX / 1000Base-T, RJ45 connector | | |
| | Resolution | [16:9 mode*] *Cannot be changed. | | |
| | H.265/ H.264/ JPEG (MJPEG) | 3840x2160, 2560x1440, 1920x1080, 1280x720, 640x360, 320x180 | | |
| | H.265/ Transmission Mode | Constant bit rate / VBR / Frame rate / Best effort | | |
| | H.264 ^{*4} Transmission Type | Unicast port (AUTO) / Unicast port (MANUAL) / Multicast | | |
| | JPEG Image Quality | 10 steps | | |
| | | | | |

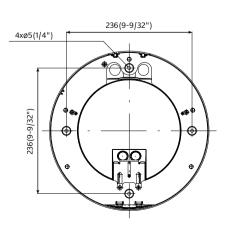
| Network | Smart Coding | GOP (Group of pictures) control : | | |
|---------|---|---|--|--|
| | | On (Frame rate control)* / On (Advanced)* / On (Mid) / On (Low) / Off | | |
| | | *On (Frame rate control) and On (Advanced) are only available with H.265 | | |
| | | Smart VIQS: On(High)/On(Low)/Off, Smart P-picture control: On/Off | | |
| | Audio Compression | G.726 (ADPCM) : 16 kbps / 32 kbps | | |
| | | G.711 : 64 kbps | | |
| | | AAC-LC*5 : 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 | | |
| | | DHCPV6, RTP, MLD, ICMP, ARP, IEEE 802.1X, DiffServ, LLDP, MQTT IPV4 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP, DHCP, DNS, DDN | | |
| | | NTP, SNMPv1/v2/v3, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, LLDP, MQT | | |
| | No. of Simultaneous Users | Up to 24 users (Depends on network conditions) | | |
| | Secure | FIPS 140-2 level3 | | |
| | SDXC/SDHC/SD | H.265 / H.264 recording : | | |
| | Memory Card | Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failur | | |
| | memory card | 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, Android™ terminals | | |
| | ONVIF [®] Profile | G/M/S/T | | |
| Alarm | Alarm Source | 3 terminals input, VMD alarm, SCD alarm, Command alarm, Audio detection alarr | | |
| | Alarm Actions | SDXC/SDHC/SD memory recording, E-mail notification, | | |
| | | HTTP alarm notification Indication on browser, TCP alarm notification output | | |
| Input/ | Monitor Output (for adjustment) | _ | | |
| Output | Audio input ^{*6} | ø3.5 mm stereo mini jack | | |
| | For microphone input : | Recommended applicable microphone : Plug-in power type | | |
| | · - · · · · · · · · · · · · · · · · · · | (Sensitivity of microphone : -48 dB±3 dB (0 dB=1 V/Pa, 1 kHz)) | | |
| | | Input impedance : Approx. 2 k Ω (unbalanced) | | |
| | | Supply voltage : 2.4 V ±0.5 V | | |
| | For line input : | | | |
| | Audio Output ^{*6} | ø3.5 mm stereo mini jack (monaural output) | | |
| | Addio Odtput | Output impedance : Approx. 600Ω (unbalanced) | | |
| | | Output level : -20 dBV | | |
| | External I/O Terminals ^{*6} | ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) | | |
| | external i/O reminals • | ALARM IN 7 (Alarm input 1) Black & write input / Auto time adjustment input) (x1) ALARM IN 2 (Alarm input 2) ALARM OUT) (x1), ALARM IN 3 (Alarm input 3) ALARM OUT/ AUX OUT) (x1) | | |
| General | Safety | UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1 | | |
| General | EMC | FCC (Part15 ClassA), ICES-003 ClassA, EN55032 ClassA, EN55024 | | |
| | Power Source and | | | |
| | | PoE+ (IEEE802.3at compliant): | | |
| | Power Consumption | DC 54 V: 470 mA/Approx. 25.4 W (Class 4 device) | | |
| | Ambient Operating | -40 °C to +60 °C*7 {-40 °F to 140 °F} | | |
| | Temperature | (Power On range: -20 °C to +60 °C {-4 °F to 140 °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 + moisture absorption gel | | |
| | 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 | When using the attachment plate only : | | |
| | | ø300 mm × 90 mm (H) {ø11-13/16 inches ×3-17/32 inches (H)} | | |
| | Mass (approx.) | When using the attachment plate only : Approx. 3.3 kg {7.28 lbs} | | |
| | Finish | Main body : Aluminum die cast, i-PRO white | | |
| | | Outer fixing screws : Stainless steel (Corrosion-resistant treatment) | | |
| | | Dome cover : PC resin, Clear | | |
| | | | | |

*2 When the 320x180 resolution is used, the "90°" and "270°" settings are not available. *3 For information on the operation verification of the supported web browsers, refer to our support website <Control No.: C0132. *4 Transmission for each stream can be individually set.

* When recording audio on an microSD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity). *6 When using with these, WV-QCA501A cable is required. *7 When using with the IR LED light constantly lit, the upper limit of the operating temperature range is +50 °C (+122 °F).

Appearance





Unit : mm (inches)

AI Video Motion Detection (AI-VMD)

Advanced video analysis technology detects objects (faces, people, cars, motorcycles) in a specified area. (Intruder Detection, Loitering Detection, Direction Detection, Cross Line Detection)

AI Face Detection

Detects faces with high precision even in low-light, backlit, and mask-wearing environments. (Max. 2 cameras working)

AI People Detection

Extract the characteristics of human face / clothing and classify them into meaningful categories such as gender, age, and clothing color.

3rd party applications are also available.

https://i-pro.com/global/en/surveillance/i-pro-application-platform/application-list

Optional Accessories

AI Vehicle Detection

Extract vehicle characteristics and classify them into meaningful categories such as type and color.

AI Non mask Detection

Deep-learning and proprietary image processing technologies recognize mask and detect people who are not wearing them.

Al Occupancy Detection

Detecting the congestion via network camera with AI engine enables that information to be used direct visitors in advance or help store staff work more efficiently.

| Ν | Mount Bracket / Other | | | | | | |
|-------------|---|---|---|---|--|--|---|
| | WALL | POLE | CORNER | HANGING | | | PARAPET |
| | 1 | 1 | 1 | 1 | 2 | 3 | 1 |
| combination | Wall Mount Bracket PWM40W (White) | Pole Mount Bracket PAPM4W (White) | Corner Mount Bracket PACA4W (White) | Ceiling Mount Bracket WV-QCL501-W (White) | Ceiling Mount Bracket WV-QCL101-W (White) *For indoor installation only. | Ceiling Mount Bracket WV-QCL101-W*1 (White) *For indoor installation only. | Mount Bracket WV-QSR503F1-W (White, ANSI Female thread) |
| | Mount Bracket WV-QSR503F1-W (White, ANSI Female thread) | Wall Mount Bracket PWM40W (White) | Wall Mount Bracket PWM40W (White) | Mount Bracket WV-QSR503-W (White) | Mount Bracket WV-QSR503M1-W (White, ANSI Male thread) | 3 rd party 1 ½" NPT pipe (Male thread) | Parapet Mount Bracket PPRM35W (White) |
| | | Mount Bracket WV-QSR503F1-W (White, ANSI Female thread) | Mount Bracket WV-QSR503F1-W (White, ANSI Female thread) | | | Mount Bracket WV-QSR503F1-W (White, ANSI Female thread) | |
| | | \sim | | | | \sim | |

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

| | CEIL | ING | OTHER | | |
|-------------|---|--|---|--|--|
| | 1 | 2 | 1 | | |
| combination | Base Bracket WV-QIB503-W (White) *The actual product may differ. | Ceiling Mount Bracket WV-Q105A (Silver) "For indoor installation only. | 3ª party 1 ½" NPT pipe (Male or Female thread) | | |
| | | Base Bracket WV-QJB503-W (White) | Mount Bracket WV-QSR503F1-W (White, ANSI Female thread) | | |
| | | *The actual product may differ. | WV-QSR503M1-W (White, ANSI Male thread) | | |

Dome Cover

Smoke dome cover WV-QDC501G



*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.

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- Android is a trademark of Google LLC.
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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.



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