

A stylish compact AI network camera that is blending seamlessly into any surrounding and providing insights beyond security.

## 2MP(1080p) Indoor mini Box Network Camera with AI Engine

i-PRO mini is compact camera that is blending seamlessly into any surrounding where you don't want the security cameras to be stand out. Equipped with an AI processor inside the camera to provide insights to solve a variety of problems. Extendable to marketing functions\* with third party AI apps.

You can easily connect to the camera with a smartphone to check the image and setting and receive notification automatically in case installed camera angle is changed so that troubles can be solved early.

\*Specific functions such as detection of inventory status on product shelves and determination of customer segments are currently under development.

### Harmonizing with the space

- The industry's smallest class\* camera that is blending seamlessly into any surrounding and does not stand out like general security camera. \*According to our own research in January 2022

### AI analytics and Marketing functions

- Equipped with an AI processor, it enables AI processing on the edge side to quickly process large amounts of data.

It can run up to three AI applications at the same time, solving a variety of problems from security to marketing\*.

\*People counting, face detection, People attribute search.

### Easy Installation, Easy Maintenance

- Images can be checked with a smartphone at the time of installation\*. In addition, the camera remembers the angle of view at which it was first installed and can be easily restored while checking the LEDs. Excellent convenience with detection and email notification when the camera direction changes. \*Sold separately Wi-Fi USB adapter is required.

#### Key i-PRO Spec.

- 2MP (1080p)
- Intelligent Auto (with AI Engine)
- Smart Coding (with AI Engine)
- ONVIF® Profile G / M / S / T  
\*ONVIF is a trademark of ONVIF, Inc.
- Direction change detection
- Compact body

#### Industry examples

- Retail / Factory / Office / Hotel / Education
- Hospital / Aged Care

**i-PRO** *mini*



## Specifications

<b>Camera</b>	Image Sensor	Approx. 1/2.8 type CMOS image sensor	
	Minimum Illumination	Color : 0.21 lx (30IRE, F2.0, 1/30s) <sup>*1</sup> Color : 0.3 lx (50IRE, F2.0, 1/30s) BW : 0.2 lx (50IRE, F2.0, 1/30s)	
	White Balance	ATW1 / ATW2 / AWC	
	Maximum shutter	[30 fps][15 fps] 16/30s Fix to 1/10000s [25 fps][12.5 fps] 16/25s Fix to 1/10000s	
	Intelligent Auto	On / Off	
	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 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	Auto/Off	
	Light control mode setting	Indoor scene (50 Hz) / Indoor scene (60 Hz)/ELC	
	Digital Noise Reduction	The level can be set in the range of 0 to 255.	
	Video Motion Detection (VMD)	On / Off, 4 areas available	
	Scene Change Detection (SCD)	On / Off, 1 areas available	
	Audio Detection	On / Off	
	AI Sound Classification	Gunshot, Yell, Vehicle horn, Glass break	
	AI Analytics	Yes	
	Privacy Zone	On / Off, Up to 8 zones available	
	VIQS	On / Off, Up to 8 zones available	
	Image rotation <sup>*2</sup>	0° / 90° / 180° / 270°	
	Camera Title (OSD)	On / Off, Up to 40 characters Up to 2 lines (alphanumeric characters, marks)	
	<b>Lens</b>	Optical zoom	1.0 x
		Extra zoom	1.0 - 3.0 x (when resolution is 640 x 360)
Focal length		3.2 mm	
Angular Field of View		[16:9 mode] Horizontal : 81.1°, Vertical : 51.4° [4:3 mode] Horizontal : 60.8°, Vertical : 51.4°	
Aperture		1 : 2.0	
Focus range	0.5 m to ∞		
<b>DORI</b>	Detect (25ppm / 8ppf)	44.9 m / 147.2 ft	
	Observe (62.5ppm / 19ppf)	18.0 m / 58.9 ft	
	Recognize (125ppm / 38ppf)	9.0 m / 29.4 ft	
	Identify (250ppm / 76ppf)	4.5 m / 14.7 ft	
<b>System on Chip (SoC)</b>	Ambarella CV22		
<b>OS</b>	OS	Microsoft Windows 11	
	Browser	Microsoft Windows 10	
<b>Network</b>	Browser <sup>*3</sup>	Microsoft Edge, Firefox, Google Chrome	
	Network IF	10Base-T / 100Base-TX, RJ45 connector	
	Resolution	[16:9 mode (30 fps mode)], [16:9 mode (25 fps mode)] 1920x1080, 1280x720, 640x360, 320x180	
	H.265 / H.264 / JPEG (MJPEG)	[4:3 mode (30 fps mode)], [4:3 mode (25 fps mode)] 1280x960, 640x480, 320x240 [4:3 mode (15 fps mode)], [4:3 mode (12.5 fps mode)] 2048x1536 <sup>*4</sup> , 1280x960, 640x480, 320x240	
	H.265 / H.264 <sup>*5</sup>	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	<b>GOP (Group of pictures control):</b> 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) <sup>*6</sup> Advanced and Frame rate control are only available with H.265.	
		<b>Smart VIQS: On(High)/On(Low)/Off, Smart P-picture control: On/Off</b>	

<b>Network</b>	Audio Compression	G.726 (ADPCM) : 16 kbps / 32 kbps G.711 : 64 kbps AAC-LC <sup>*6</sup> : 64 kbps / 96 kbps / 128 kbps	
	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, SFTP, MQTT, LLDP 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, IEEE 802.1X, DiffServ, SRTP, SFTP, MQTT, LLDP	
	Security	User authentication, Host authentication, HTTPS	
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)	
	Multi-screen	Display 16 cameras simultaneously Supports only MJPEG/JPEG (still image update)	
	microSD 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 -), Android™ terminals	
	ONVIF <sup>®</sup> Profile	G / M / S / T	
	<b>General</b>	Safety	CE, IEC62368-1
		EMC	FCC (Part15 ClassA), ICES-003 ClassA, EN55032 ClassA, EN55035
Power Source and Power Consumption		DC5 V(USB Type-C) (USB Power Delivery not supported), 1.5 A, Approx. 7.5 w PoE (IEEE802.3af compliant) Device : DC48 V 170 mA, Approx. 8.2 W(Class 0 device)	
Ambient Operating Temperature		-10 °C to +40 °C (14 °F to 104 °F) Power on : 0 °C - +40 °C (32 °F to 104 °F)	
Ambient Operating Humidity		10 to 90 % (no condensation)	
Built-in microphone		Omnidirectional Electret Condenser Microphone x2	
USB port		High-speed serial interface (theoretical value: 480 Mbps) USB2.0 1 line	
Waterproof		IP44 (IEC 60529)	
Dimensions		<b>Without protective cover</b> 102 mm (W) × 48 mm (H) × 21 mm (D) {4-1/32 inches (W) × 1-7/8 inches (H) × 13/16 inches (D)} (Depth when mounting seat is installed: +29.5 mm {+1-5/32 inches}) <b>With protective cover</b> 103.5 mm (W) × 51 mm (H) × 24 mm (D) {4-1/16 inches (W) × 2 inches (H) × 15/16 inches (D)} (Depth when mounting seat is installed: +28 mm {+1-3/32 inches})	
Mass (approx.)		Approx. 157 g (excluding the mounting base and protective cover) Approx. 169 g (excluding the mounting base, including the protective cover) Approx. 197 g (including mounting base and protective cover)	
Finish	PC resin, Aluminum die-casting, i-PRO white		

<sup>\*1</sup> Converted value

<sup>\*2</sup> When the 320x180 resolution is used, the "90°" and "270°" settings are not available.

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

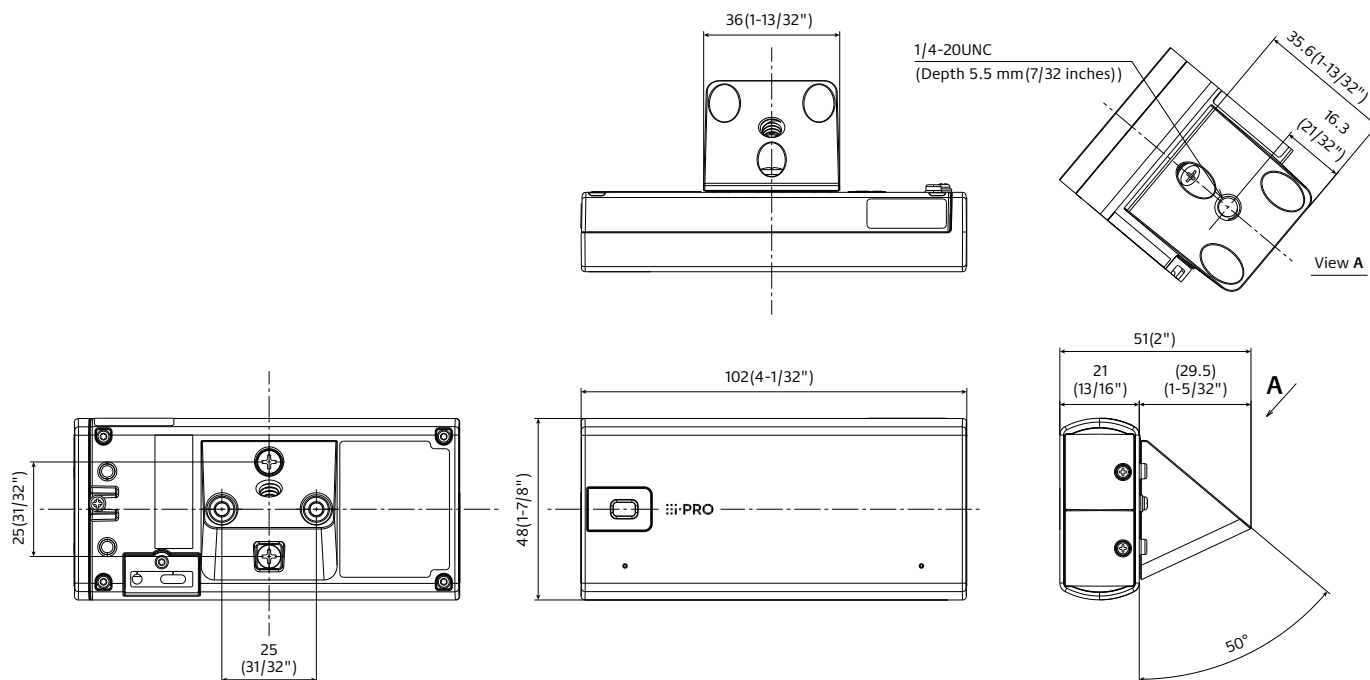
<sup>\*4</sup> Used by super resolution techniques.

<sup>\*5</sup> Transmission for 4 streams can be individually set.

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

## Appearance

Unit : mm (inches)



## AI Analytics applications

<https://i-pro.com/global/en/surveillance/products/i-pro-ai-application>

### 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 Privacy Guard

To protect privacy and portrait rights, it is possible to automatically apply a mosaic the entire face and figure of a person photographed by the camera.

### AI Face Detection

Detects faces with high precision even in low-light, backlit, and mask-wearing environments.

### AI People Detection

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

### 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.

### AI 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.

3rd party applications are also available.

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

## Optional Accessories

### Mount Bracket / Other

	CEILING	LIGHT RAIL
combination	1	1
	Universal Camera Mount Bracket <b>WV-QCL102-W</b> (White) 	Light Rail Mount Bracket <b>WV-QLR100-W</b> (White) 
	3rd Parties Bracket (for setting on shelf, ceiling etc..)	

#### 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.

#### 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.