

## U series PTZ camera

# 2MP (1080p) 21x Indoor PTZ Network Camera

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

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

- 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 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)
- Durable Pan/Tilt gear mechanism
- ONVIF® Profile G / S / T
- \*ONVIF is a trademark of ONVIF, Inc.
- FIPS 140-2 level3 certified

### Industry examples

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



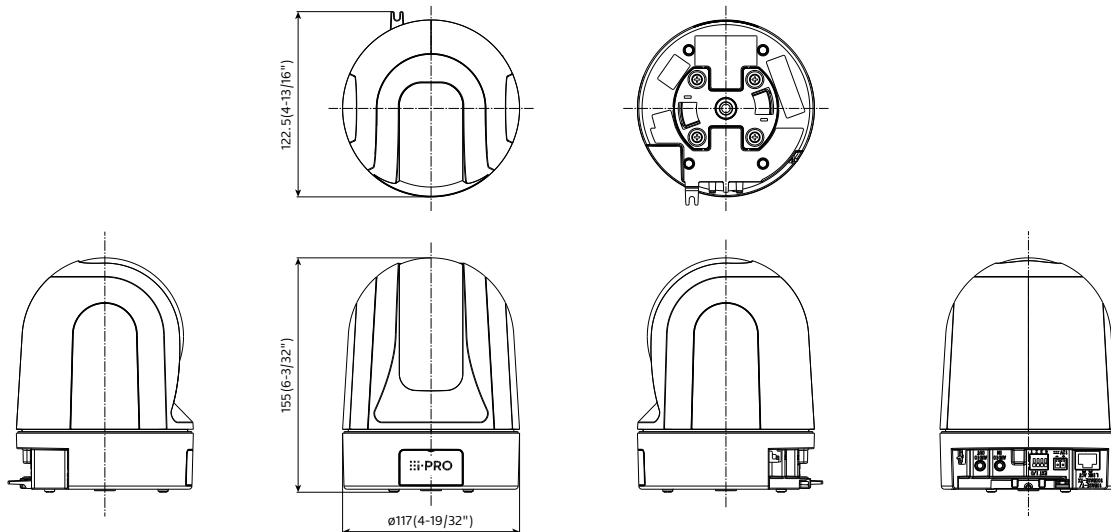
# Specifications

<b>Camera</b>	Image Sensor	Approx. 1/2.8 type CMOS image sensor	
	Minimum Illumination	Color : 0.015 lx (50IRE, F1.6, 1/30s) Color : 0.001 lx (50IRE, F1.6, 16/30s)*1 BW : 0.006 lx (50IRE, F1.6, 1/30s) BW : 0.0004 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*2	On / Off. The level can be set in the range of 0 to 31.	
	Dynamic Range	Max.144 dB (Super Dynamic : On, Level 31)	
	Adaptive Black Stretch	The level can be set in the range of 0 to 255.	
	Back light compensation / High light compensation	BLC (Back light compensation) / HLC (High light compensation) / Off The level can be set in the range of 0 to 31 (only when Super dynamic / Intelligent Auto : Off)	
	Fog compensation	On / Off. The level can be set in the range of 0 to 8 (only when Intelligent auto / auto contrast adjust : Off)	
	Maximum gain (AGC)	The level can be set in the range of 0 to 11.	
	Color/BW (ICR)	Off / On / Auto1 / Auto2 / Auto3 (SCC)	
	Digital Noise Reduction	The level can be set in the range of 0 to 255.	
	Video Motion Detection (VMD)	On / Off, 4 areas available	
	Scene Change Detection (SCD)	On / Off, 1 areas available	
	Audio Detection	On / Off	
	AI Sound Classification	—	
	AI Analytics	—	
	Privacy Zone	On / Off, Up to 32 zones available	
	VIQS	On / Off, Up to 8 zones available	
Image Stabilizer	On / Off		
Camera Title (OSD)	On / Off, Up to 40 characters (alphanumeric characters, marks)		
Focus Adjustment	Auto focus		
<b>Lens</b>	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	<b>[16 : 9 mode]</b> Horizontal : 3.7° (TELE) - 77° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE) <b>[4 : 3 mode]</b> Horizontal : 2.8° (TELE) - 58° (WIDE), Vertical : 2.2° (TELE) - 44° (WIDE)	
Maximum Aperture Ratio	1 : 1.6 (WIDE) - 1 : 4.5 (TELE)		
Focus range	1.5 m (50-1/16 inches) - ∞		
<b>DORI</b>	Detect (25ppm / 8ppf)	Wide: 51.9 m / 170.3 ft, Tele: 1293.8 m / 4244.9 ft	
	Observe (62.5ppm / 19ppf)	Wide: 20.8 m / 68.1 ft, Tele: 517.5 m / 1697.9 ft	
	Recognize (125ppm / 38ppf)	Wide: 10.4 m / 34.1 ft, Tele: 258.8 m / 849.0 ft	
	Identify (250ppm / 76ppf)	Wide: 5.2 m / 17.0 ft, Tele: 129.4 m / 424.5 ft	
<b>System on Chip (SoC)</b>		Ambarella CV25M	
<b>Adjusting Angle</b>		Horizontal : 0 to +350°, Vertical : -30 to +90°, Yaw : 0°	
<b>Pan/tilt</b>	Panning Range	0 ~ +350°	
	Panning Speed	Manual: Approx. 0.065°/s ~ 150°/s Preset: Up to approx. 500°/s	
	Tilting Range	Operational -30° ~ +90°	
	Tilting Speed	Manual: Approx. 0.065°/s ~ 150°/s Preset: Up to approx. 350°/s	
	Preset Positions	256 positions	
	Auto Mode	Auto pan/ Preset sequence/ Patrol	
	Self Return	10 s / 20 s / 30 s / 1min / 2 min / 3 min / 5 min / 10 min / 20 min / 30 min / 60 min	
	<b>Browser GUI</b>	Camera Control	Brightness, AUX On / Off
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		
<b>Network</b>	Network IF	10Base-T / 100Base-TX, RJ45 connector	
	Resolution	<b>[16 : 9 mode (60 fps mode)]</b> *2, <b>[16 : 9 mode (30 fps mode)]</b> , <b>[16 : 9 mode (50 fps mode)]</b> *2, <b>[16 : 9 mode (25 fps mode)]</b> 1920x1080, 1280x720, 640x360, 320x180 <b>[4 : 3 mode (30 fps mode)]</b> , <b>[4 : 3 mode (25 fps mode)]</b> 1280x960, VGA, QVGA <b>[4 : 3 mode (15 fps mode)]</b> , <b>[4 : 3 mode (12.5 fps mode)]</b> 2048x1536*4, 1280x960, VGA, QVGA	
	H.265 / H.264*5	Transmission Mode	Constant bit rate / VBR / Frame rate / Best effort
	JPEG	Transmission Type	Unicast port (AUTO) / Unicast port (MANUAL) / Multicast
		Image Quality	10 steps

<b>Network</b>	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) *Advanced and Frame rate control are only available with H.265. <b>Smart Coding: Auto VIQS: On/Off</b>
	Audio Compression	G.726 (ADPCM) : 16 kbps / 32 kbps G.711 : 64 kbps AAC-LC*6 : 64 kbps / 96 kbps / 128 kbps
	Audio transmission mode	Off / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex)
	Supported Protocol	IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, SMTP, DNS, NTP, SNMPv1/v2/v3, DHCPv6, RTP, MLD, ICMP, ARP, IEEE 802.1X, DiffServ, SFTP, MQTT, LLDP IPv4 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTCP, SMTP, DHCP, DNS, DDNS, NTP, SNMPv1/v2/v3, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, SFTP, MQTT, NTCP
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)
	Secure	FIPS 140-2 level3, Device Certificate GlobalSign® pre-installed
	SDXC/SDHC/SD Memory Card	H.265 / H.264 recording : 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® Profile	G / S / T
	<b>Alarm</b>	Alarm Source
Alarm Actions		SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, TCP alarm notification output
<b>Input/ Output</b>	Audio input	Ø3.5 mm stereo mini jack
	For microphone input :	Recommended applicable microphone : Plug-in power type (Sensitivity of microphone : -51 dB to -38 dB (0 dB=1V/Pa, 1 kHz)) Input impedance : Approx. 2 kΩ (unbalanced) Supply voltage : 2.5 V ±0.5 V
	For line input :	Input level : Approx. -10 dBV
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) (x1), ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)	
<b>General</b>	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 Power Consumption	DC12 V, PoE (IEEE802.3af) DC12 V: 970 mA / Approx. 11.6 W PoE DC 48 V: 270 mA / Approx.12.95 W (Class 0device)
	Ambient Operating Temperature	-10 °C to +50 °C (+14 °F to +122 °F) (Power On range : 0 °C to +50 °C (+32 °F to +122 °F))
	Ambient Operating Humidity	10 to 90 % (no condensation)
	Anti-Condensation System	—
	Dimensions	Ø117 mm x 155 mm (H) (Ø4-19/32 inches x 6-3/32 inches (H))
Mass (approx.)	Approx. 1.2 kg (2.65 lbs)	
Finish	Main body : Resin, i-PRO white	

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










# Appearance






Unit : mm (inches)

# Optional Accessories

## Mount Bracket / Other

		WALL		POLE	CORNER	HANGING
		1	2	1	1	1
combination	Wall Mount Brackets <b>WV-QWD100G-W</b> (Smoke) <b>WV-QWD100C-W</b> (Clear) (White)	Wall Mount Bracket <b>WV-QWL500-W</b> (White)	Pole Mount Bracket <b>PAPM4W</b> (White)	Corner Mount Bracket <b>PACA4W</b> (White)	Ceiling Mount Bracket <b>WV-QCL101-W</b> *1 (White)	
						
	Adapter Box <b>WV-QJB500-W</b> (White)	Wall Mount Brackets <b>WV-QWD100G-W</b> (Smoke) <b>WV-QWD100C-W</b> (Clear) (White)	Wall Mount Brackets <b>WV-QWD100G-W</b> (Smoke) <b>WV-QWD100C-W</b> (Clear) (White)	Wall Mount Brackets <b>WV-QWD100G-W</b> (Smoke) <b>WV-QWD100C-W</b> (Clear) (White)		
						

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

		CEILING		
		1	2	3
combination	Ceiling Mount Brackets <b>WV-QED100G-W</b> (Smoke) <b>WV-QED100C-W</b> (Clear) (White)	Ceiling Mount Brackets <b>WV-QCD100G-W</b> (Smoke) <b>WV-QCD100C-W</b> (Clear) (White)	Ceiling Mount Bracket <b>WV-Q105A</b> (Silver)	
				

## Inner Cover



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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.