

## New U-series compact network camera with enhanced functions and affordability

# Full HD Varifocal Lens Indoor Dome Network Camera

The new U series is an entry model that achieves high quality and reliability at an affordable price to meet the needs of a wide range of customers. The compact and slim design allows it to be installed in a various locations.

It newly supports ONVIF G / S / T profile and H.265 / H.264, and can be widely used for connecting various VMS and recorders. It also comes pre-installed with secure certificates, enabling device authentication and end-to-end communication encryption to counter the threat of advanced cyberattacks.

### Key features

- Compact and slim design allows installation in various locations
- Compliant with ONVIF G / S / T profile and H.265 / H.264, and can support a wide range of connections to VMS and recorders
- Uses "Easy Kitting Packing" that allows you to set the camera without removing it from the box
- Strengthen cyber security by pre-installing digital certificates issued by a third party organization (GlobalSign)

### Key i-PRO Spec.

- Full HD 1080p up to 30fps
- 2.5x built-in motorized zoom and motorized focus lens
- iA (intelligent Auto)
- Super Dynamic 120dB
- Color night vision (0.006 to 0.1 lx)
- H.265 Smart Coding
- Corridor mode  
(90 degrees or 270 degrees in image rotation)
- Built-in IR LED
- ONVIF Profile G / S / T

### Industry examples

- Retail
- Education
- Public safety
- Bank / Hospital / Building



# Specifications

<b>Camera</b>	Image Sensor	Approx. 1/3 type CMOS image sensor				
	Minimum Illumination	Color : 0.1 lx, BW : 0.04 lx (50IRE, F2.0, Maximum shutter : Off (1/30s), AGC : 11) BW : 0 lx (50IRE, F2.0, Maximum shutter : Off (1/30 s), AGC : 11, when the IR LED is lit) Color : 0.006 lx, BW : 0.0025 lx (50IRE, F2.0, Maximum shutter : max. 16/30s, AGC : 11) *1				
	White Balance	ATW1/ ATW2/ AWC				
	Maximum shutter	<b>[30fps mode]</b> Max. 1/10000 s to Max. 16/30 s <b>[25fps mode]</b> Max. 1/10000 s to Max. 16/25 s				
	Intelligent Auto	On / Off				
	Super Dynamic	On / Off, The level can be set in the range of 0 to 31.				
	Dynamic Range	Max.120 dB (Super Dynamic : On, Level: 31)				
	Adaptive Black Stretch	—				
	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, 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 (IR Light Off) / On (IR Light On) / Auto1 (IR Light Off) / Auto2 (IR Light On) / Auto3 (SCC)				
	IR LED Light	High / Middle / Low / Off, Maximum irradiation distance : 30 m (Approx. 100 ft)				
	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				
	Privacy Zone	On / Off, Up to 8 zones available				
	Image rotation*2	0° (Off) / 90° / 180° (Upside-down) / 270°				
	Camera Title (OSD)	On / Off, Up to 20 characters (alphanumeric characters, marks)				
	<b>Lens</b>	Focal length	2.9 mm – 7.3 mm (1 1/8 inches – 9/32 inches)			
Optical zoom		2.5x (Motorized zoom / Motorized focus)				
Extra optical zoom		2.5x – 3.8x (when resolution is 1280x720)				
Digital (electronic) zoom		Choose from 3 levels of x1, x2, x4				
Angular Field of View		<b>[16 : 9 mode]</b> Horizontal : 43° (TELE) – 100° (WIDE) Vertical : 24° (TELE) – 56° (WIDE) <b>[ 4 : 3 mode]</b> Horizontal : 36° (TELE) – 83° (WIDE) Vertical : 27° (TELE) – 62° (WIDE)				
Maximum Aperture Ratio		1 : 2.0 (WIDE) – 1 : 3.0 (TELE)				
Focusing Range		1 m (39-3/8 inches) – ∞				
<b>DORI</b>		Detect (25ppm / 8ppf)	Wide: 36.2 m / 118.7 ft, Tele: 98.5 m / 323.1 ft			
		Observe (62.5ppm / 19ppf)	Wide: 14.5 m / 47.5 ft, Tele: 39.4 m / 129.2 ft			
		Recognize (125ppm / 38ppf)	Wide: 7.2 m / 23.7 ft, Tele: 19.7 m / 64.6 ft			
	Identify (250ppm / 76ppf)	Wide: 3.6 m / 11.9 ft, Tele: 9.8 m / 32.3 ft				
<b>Adjusting Angle</b>	Horizontal (PAN) angle: ±180°, Vertical (TILT) angle: -30° ~ +85° Azimuth (YAW) angle: ±100°					
	Brightness					
<b>Browser GUI</b>	Camera Control	Brightness				
	GUI / Setup Menu Language	English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese				
<b>Network</b>	Network IF	10Base-T / 100Base-TX, RJ45 connector				
	Resolution	<b>[16 : 9 mode]</b> 1920x1080, 1280x720, 640x360, 320x180 <b>[ 4 : 3 mode]</b> 1600x1200, 1280x960, VGA, QVGA				
	H.265/H.264	Transmission Mode Constant bit rate / VBR / Frame rate / Best effort				
	H.265/H.264	Transmission Type Unicast / Multicast				
		Max. frame rate for each stream*3	<b>Stream(1)</b>	<b>Stream(2)</b>	<b>Stream(3)</b>	<b>JPEG(1)</b>
		1920x1080(30fps)	640x360(30fps)	Off	1920x1080(1fps)	1280x720(1fps)
		1280x720(30fps)	1280x720(30fps)	Off	1920x1080(1fps)	1280x720(1fps)
		1600x1200(30fps)	640x480(30fps)	Off	1600x1200(1fps)	1280x960(1fps)
JPEG	Image Quality	10 steps				

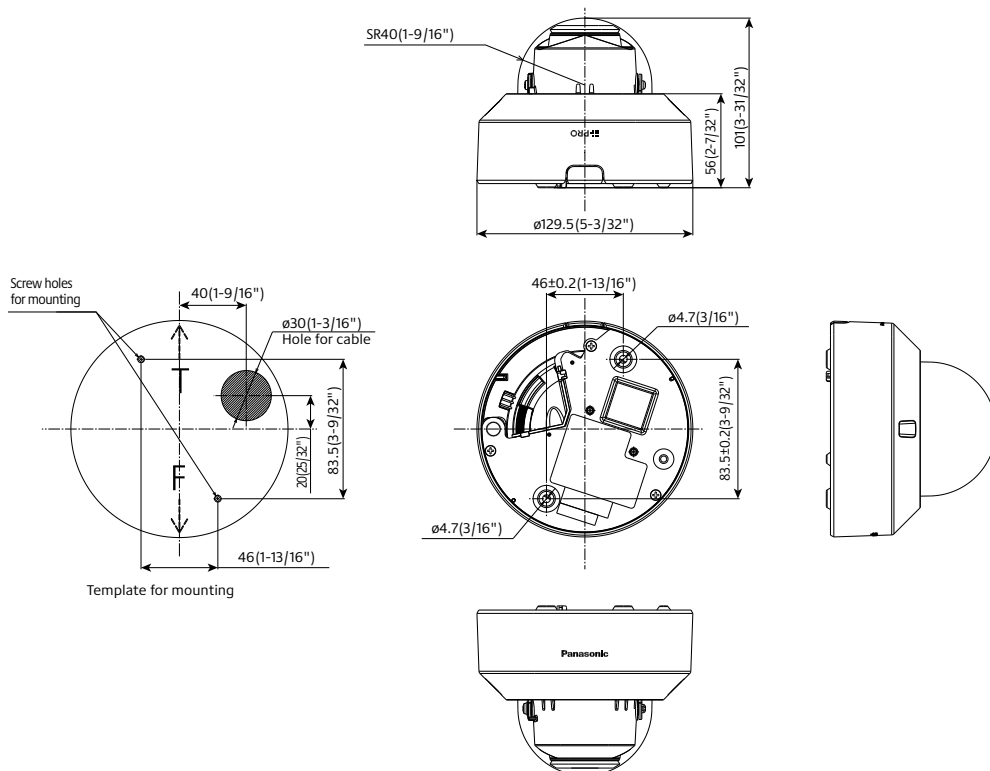
<b>Network</b>	Smart Coding	<b>GOP(Group of pictures) control:</b> On(Frame rate control) / On(Advanced) / On(Mid) / On(Low) / Off *Frame rate control and Advanced are only available with H.265. <b>AUTO VIQS: On / Off</b>		
	Audio Compression	—		
	Audio transmission mode	—		
	Supported Protocol	IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, SMTP, DNS, NTP, SNMPv1/v2/v3, DHCPv6, RTP, MLD, ICMP, ARP, IEEE 802.1X, DiffServ 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		
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)		
	SDXC/SDHC/SD Memory Card (Option)	H.265/H.264 recording: Manual REC / Alarm REC (Pre/Post) / Schedule REC Available 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 / S / T		
	<b>Alarm</b>	Alarm Source	VMD alarm, SCD alarm, Command alarm	
		Alarm Actions	SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, Panasonic alarm protocol output	
<b>Input/Output</b>	Monitor Output (for adjustment)	—		
	Audio input	—		
	Audio Output	—		
<b>General</b>	External I/O Terminals	—		
	Safety	UL (UL60950-1), c-UL (CSA C22.2 No.60950-1), CE, IEC60950-1		
	EMC	FCC (Part15 ClassA), ICES003 ClassA, EN55032 ClassB, EN55024		
	Power Source and Power Consumption	PoE (IEEE802.3af compliant) Device : DC48 V 120 mA, Approx. 5.8 W (Class 2 device)		
	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)		
	Dimensions	ø129.5 mm x 101 mm (H) (ø5-3/32 inches x 3-31/32 inches (H)) Dome radius 40 mm (1-9/16 inches)		
Mass (approx.)	Approx. 350 g (0.77 lbs)			
Finish	Main body : ABS resin, i-PRO white Dome cover : acrylic resin, Clear			

\*1 Converted value

\*2 When "4:3(30fps mode)" or "4:3(25fps mode)" is selected for "Image capture mode", "90 °" and "270 °" cannot be selected.

\*3 Smart Coding(GOP and AUTO VIQS) is not available when setting 30fps.











# Appearance








Unit : mm (inches)

## Optional Accessories

### Mount Bracket / Other

		WALL		POLE	CORNER
		1	2	1	1
combination	Wall Mount Bracket <b>WV-QWL500-W</b> (White) 	Wall Mount Bracket <b>WV-QWL501-W</b> (White) 	Pole Mount Bracket <b>PAPM4W</b> (White) 	Corner Mount Bracket <b>PACA4W</b> (White) 	
	Adapter Box <b>WV-QJB500-W</b> (White)  *If needed.	Mount Bracket <b>WV-QSR501-W</b> (White) 	Wall Mount Bracket <b>WV-QWL500-W</b> (White) (+ <b>WV-QJB500-W</b> )  + 	Wall Mount Bracket <b>WV-QWL500-W</b> (White) (+ <b>WV-QJB500-W</b> )  + 	

		HANGING		CEILING	
		1	2	1	2
combination	Ceiling Mount Bracket <b>WV-QCL501-W</b> (White) 	Ceiling Mount Bracket <b>WV-QCL101-W</b> <sup>*1</sup> (White) 		Ceiling Mount Bracket <b>WV-Q105A</b> 	Ceiling Mount Bracket (Embedded) <b>WV-QEM100-W</b> (White) 
	Mount Bracket <b>WV-QSR501-W</b> (White) 	This bracket requires 1 1/2" NPT pipe.			

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

### Dome Cover

Dome Cover (Smoke type)  
**WV-CF5SA**



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#### Important

- Safety Precautions : Carefully read the Basic Information, Installation Guide and Operating Instructions before using this product.
- Panasonic i-PRO Sensing Solutions 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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