

Preliminary

Full HD / 1,920 x 1,080 60 fps H.265 Vandal Resistant Network Camera featuring *Super Dynamic*

Key Features

- Extreme Super Dynamic technologies deliver 144 dB wide dynamic range.
- Intelligent Auto (iA) feature provides increased discernibility even in environments with poor visibility.
- High sensitivity with Day/Night (ICR*) function : 0.012 lx (Color), 0.006 lx (B/W) at F1.6
*ICR : IR Cut filter Removal
- H.265 compression and Smart coding technology realize high image quality streaming at low bit rates.
- Intelligent Face Compression provides high picture quality at “Face best shot area” while reducing other non-important areas to save the network bandwidth and the disk space of recorder.
- Encryption and alteration detection functions enhanced the security.
- The Easy Kitting Package makes setting camera easy.



Specifications

Camera	Image Sensor	Approx. 1/3 MOS image sensor
	Minimum Illumination	Color : 0.012 lx, BW : 0.006 lx (F1.6, Maximum shutter : Max. 1/30s, AGC : 11) BW : 0 lx (F1.6, Maximum shutter : Off(1/30 s), AGC : 11, when the IR LED is lit) Color : 0.0008 lx, BW : 0.0004 lx (F1.6, Maximum shutter : Max. 16/30s, AGC : 11) *1
	White Balance	AWC (2,000 - 10,000 K), ATW1 (2,700 - 6,000 K), ATW2 (2,000 - 6,000 K)
	Shutter Speed	Off(1/30) to 1/10000 *1/30 Fix to 2/100 Fix is available during 30 fps mode only.
	Intelligent Auto	On / Off
	Super Dynamic ²	On / Off, the level can be set in the range of 0 to 31.
	Dynamic Range	144 dB (Super Dynamic : On)
	Adaptive Black Stretch	The level can be set in the range of 0 to 255.
	Black light compensation / High light compensation	BLC (Black light compensation) / HLC (High light compensation) / Off (Only when Super dynamic and Intelligent Auto : Off)
	Fog compensation	On / Off (Only when Intelligent Auto : Off)
	AGC	The level can be set in the range of 0 to 11.
	Day/Night (ICR)	Off / On / Auto1 (Normal) / Auto2 (IR Light) / Auto3 (SCC)
	IR LED	Off / Auto (High / Mid / Low) irradiation distance : 30 m (98 feet)
	Digital Noise Reduction	The level can be set in the range of 0 to 255.
	Video Motion Detection	On / Off, 4 areas available
	Privacy Zone	On / Off (up to 8 zones available)
	Camera Title (OSD)	On / Off Up to 20 characters (alphanumeric characters, marks)
Focus Adjustment	Auto back focus / Manual / Adjusting method (Auto / Preset / Fix)	
Lens	Focal length	2.8 - 10 mm (1/8 inches - 13/32 inches)
	Zoom ratio	3.6 x (Motorized zoom / Auto Focus)
	Angular Field of View	[16 : 9 mode] Horizontal : 30° (TELE) - 110° (WIDE) Vertical : 17° (TELE) - 59° (WIDE) [4 : 3 mode] Horizontal : 25° (TELE) - 90° (WIDE) Vertical : 19° (TELE) - 66° (WIDE)
	Maximum Aperture Ratio	1 : 1.6 (WIDE) - 1 : 3.4 (TELE)
	Focusing Range	0.3 m (11-13/16 inches) - ∞
Adjusting Angle		Horizontal : -240 to +120°, Vertical : -30 to +85°, Yaw : ±100°
Browser GUI	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
Network	Network IF	10Base-T / 100Base-TX, RJ45 connector
	Image Resolution	*2 mega pixel [16 : 9] (30/60 fps) 1,920 x 1,080 / 1,280 x 720 / 640 x 360 / 320 x 180 *3 mega pixel [4 : 3] (30 fps) 2,048 x 1,536 / 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240 *Used by super resolution techniques
	H.265/ H.264 ³	Transmission Mode Constant bit rate / VBR / Framerate priority / Best effort
	JPEG	Transmission Type Unicast / Multicast
	Smart Coding	Image Quality 10 steps
		Smart Facial Coding : On (Smart Facial Coding) / On (Auto VIQS) / Off *Smart Facial Coding is only available with Stream(1).
		GOP (Group of pictures) : On (Advanced) / On (Low) / On (Mid) / Off *On(Advanced) is only available with H.265.

Network	Audio Compression	G.726 (ADPCM) : 32 kbps / 16 kbps, G.711 : 64 kbps, AAC-LC ⁴ : 64 kbps / 96 kbps / 128 kbps	
	Audio Mode	Off / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex)	
	Supported Protocol	IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, MLD, IGMP, ARP, DiffServ IPv4 : TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP, 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 / Backup upon network failure JPEG recording : Manual REC / Alarm REC (Pre/Post) / Backup upon network failure Compatible SD (SDHC/SDXC) card : Panasonic 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB*, 64 GB**, 128 GB** model *SDHC card, ** SDXC card (except miniSD card and microSD card)	
	Mobile Terminal Compatibility	iPad, iPhone, Android™ mobile terminals	
	Alarm	Alarm Source	3 terminals input, VMD, Command alarm, Audio detection alarm
		Alarm Actions	SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, FTP image transfer, Panasonic protocol output
	Input/ Output	Monitor Output (for adjustment)	VBS : 1.0 V [p-p] / 75 Ω, composite, RCA jack An NTSC or PAL signal can be outputted from camera
		Microphone/Line Input	ø3.5 mm stereo mini jack (Applicable microphone : Plug-in power type) Supply voltage : 2.5 V ±0.5 V
Audio Output		ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 Ω (unbalanced)	
External I/O Terminals		ALARM IN 1 (DAY/NIGHT IN, Auto time adjustment) (x1), ALARM IN 2 (ALARM OUT) (x1), ALARM IN 3 (AUX OUT) (x1)	
General	Power Source and Power Consumption	DC power supply : DC12 V / 560 mA / Approx. 6.8 W PoE (IEEE802.3at compliant) Device : DC48 V / 150 mA / Approx. 7.2 W* (Class 0 device) * Maximum power consumption on the camera power input side. ** ONLY CONNECT DC12 V CLASS 2 POWER SUPPLY.	
	Ambient Operating Temperature	-10 °C to +50 °C (14 °F to 122 °F)	
	Ambient Operating Humidity	10 to 90 % (no condensation)	
	Shock Resistance	Compliant with IK10 (IEC 62262)	
	Dimensions	ø129.5 mm x 102.5 mm (H) (ø5-3/32 inches x 4-1/32 inches (H)) Dome radius 41.5 mm (1-5/8 inches)	
	Mass (approx.)	Approx. 750 g (1.65 lbs)	
	Finish	Main body : Aluminum die cast, sail white Dome section : Clear polycarbonate resin	

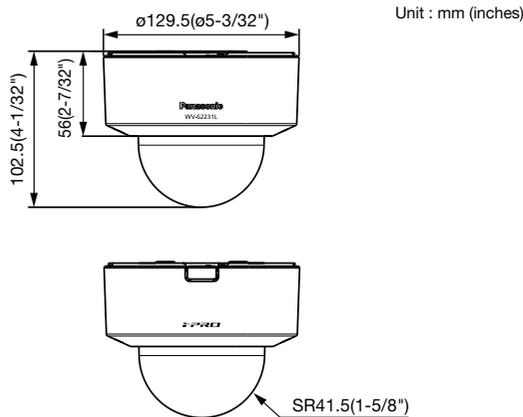
*1 Converted value

*2 Super Dynamic function is automatically set off on 60 fps mode.

*3 H.265 / H.264 can be selected for each stream.

*4 Only use AAC-LC (Advanced Audio Coding - Low Complexity) when recording audio on an SD memory card.

Appearance



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• Masses and dimensions are approximate. • Specifications are subject to change without notice.

Optional Accessories

Ceiling Mount Bracket WV-Q105A 	Embedded Ceiling Mount Bracket WV-Q174B 	Smoke Dome Cover WV-CR1S 
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Important

- Safety Precaution : Carefully read the Important Information, Installation Guide and operating instructions before using this product.
- Panasonic cannot be responsible for the performance of the network and/or other manufacturers' products used on the network.

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