Panasonic

Super Dynamic Full HD Vandal Resistant Dome Network Camera

WV-SFR631L

Super Dynamic HD Vandal Resistant Dome Network Camera

WV-SFR611L

Full HD / 1,920 x 1,080 60 fps H.264 Vandal Resistant Network Camera featuring *Super Dynamic* (WV-SFR631L)

HD / 1,280 x 720 60 fps H.264 Vandal Resistant Network Camera featuring *Super Dynamic* (WV-SFR611L)

Key Features

- **1080p** Full HD / **720p** HD images up to **60 fps**[*1]
- Approximate 1/3 inches, high sensitivity MOS Sensor
- Super high resolution at Full HD/1,920 x 1,080 created by high sensitivity MOS Sensor. (WV-SFR631L only)
- **Multiple H.264 (High profile) streams (max. 4 streams)** and JPEG streams ensure simultaneous real time monitoring and high resolution recording by new enhanced "UniPhier®", Panasonic's proprietary System LSI platform.
- Maximum Screen Size is 2,048 x 1,536* @30fps, H.264 (WV-SFR631L only)
  * Used by super resolution techniques
- ***Enhanced Super Dynamic***[*1] and ABS (Adaptive Black Stretch) technologies deliver **133 dB** wider dynamic range compared to conventional cameras.
- **Multi process NR & 3D-DNR** ensures noise reduction in various conditions.
- High sensitivity with Day & Night (IR) function:
  WV-SFR631L: 0.04 lx (Color), 0.01 lx (B/W) at F1.3
  WV-SFR611L: 0.01 lx (Color), 0.003 lx (B/W) at F1.3
- **IR LED** equipped: The equipped infrared LED makes it possible to take pictures at zero lx.
- **IR LED** is controlled to match the environment, thereby the camera provides clear images of human faces without white blur.
- New camera attachment bracket allows an **easy camera installation** toward all four directions.
- **High Speed ABF (Auto Back Focus) and Motorized Zoom** ensures easy installation.
- Newly developed lens with aperture control function realizes the best focus in any environment.
- **VIQS** (Variable Image Quality on Specified area) technology allows the designated **eight areas** to retain higher image quality while the excluded area will have a decreased image quality, which enables to use lower image file size and bit rate.
- Cropping function enables to provide whole image and the part image simultaneously. Up to 4 image capture areas can be specified, and it is also possible to control the sequence.
- ***Face Super Dynamic*** technology ensures clear face image.
- Lens distortion compensation for the distorted images can be adjusted 256 steps.
- Electronic sensitivity enhancement: Auto (Up to 16/30s) / OFF
- Selectable light control modes:
  Outdoor scene,Indoor scene (50 Hz) / Indoor scene (60 Hz),Fix shutter
  Indoor scene (50 Hz/60Hz): Flicker caused by fluorescent lightning will be automatically compensated.
- 3x (WV-SFR631L), 2x (WV-SFR611L) extra optical zoom at 640 x 360 resolution
- 2x, 4x digital zoom controlled by browser
- VMD (Video Motion Detection) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Privacy Zone can mask up to 8 private areas, such as house windows and entrances/exits.
- Camera title display: Up to 20 alphanumeric characters on the browser
- Alarm sources including 3 terminal input, VMD and Panasonic alarm command can trigger actions such as SDXC/SDHC/SD memory recording, FTP image transfer, E-mail notification, Indication on browser, Alarm terminal output, and Panasonic alarm protocol output.
- Full duplex bi-directional audio allows interactive communication between camera site and monitoring site.
- JPEG Image compression ratio can be changed by alarm so that higher quality image can be provided.
- Prioritized stream control: One of the video streams can be prioritized when multiple recorders or client PCs are accessing the camera so that the recorder or the client PC can maintain the frame rate.
- **Double SDXC/SDHC/SD Memory card slots** for manual recording (H.264 / JPEG), alarm recording (H.264 / JPEG) and backup upon network failure (H.264 / JPEG). Realize long-term recording and auto backup function.
- Newly developed dome cover provides clearer images above the horizontal. Thereby, it expands the tilting range of the lens.
- Face detection function detects the position of human face and the information is sent by XML or video stream.(Optional WV-SAE100 or WV-SAE200 *As of May 2014)
- Can be added new intelligent extension software (Optional WV-SAE200 *As of May 2014) in addition to built-in VMD (Video Motion Detection), alarm function.
- **Fog compensation function** equipped as standard.
- **Super Chroma Compensation** function realizes a better color reproducibility even in low illumination.
- H.264 max. bit rate/client and Total bit rate control allows flexible network traffic management. Frame rate priority mode controls bit rate and compression ratio to provide the specified frame rate.
- Internet mode: H.264 images can be transmitted over HTTP protocol.
- Multi-language: English / Italian / French / German / Spanish / Portuguese / Russian / Chinese / Japanese
- IPv4/IPv6 protocol supported
- Supports SSL, DDNS (viewnetcam, RFC2136)
- Still images (JPEG) can be viewed on mobile phones via Internet.
- Onvif compliant model
- Vandal resistant mechanism for high reliability

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

Optional Accessories

Ceiling Mount Bracket **WV-Q105A**	Ceiling Mount Bracket **WV-Q174B**	Smoke Dome Cover **WV-CR1S**
Extension Software for Face Detection Function **WV-SAE100**	Extension Software for Intelligent Video Motion / Face Detection Function **WV-SAE200**	

Specifications

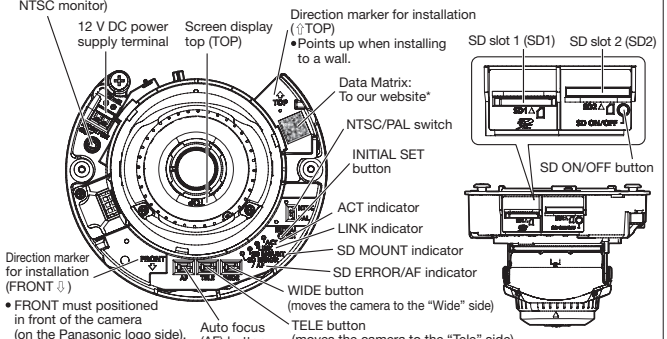
Camera	Image Sensor		Approx. 1/3 type MOS image sensor
	Effective Pixels		WV-SFR631L : Approx. 2.4 mega pixels, WV-SFR611L : Approx. 1.3 mega pixels
	Scanning Mode		Progressive scan
	Scanning Area		WV-SFR631L : 5.346 mm (H) x 3.336 mm (V) {7/32 inches(H) x 1/8 inches(V) } WV-SFR611L : 4.864 mm (H) x 3.891 mm (V) {3/16 inches(H) x 5/32 inches(V) }
	Minimum Illumination		WV-SFR631L : Color: less than 0.04 lx, BW: 0.01 lx (F1.3, Maximum shutter : Max. 1/30s, Gain : On(High)) Color: less than 0.003 lx, BW 0.0007 lx (F1.3, Maximum shutter : Max. 16/30s, Gain : On(High)) *1 WV-SFR611L : Color: less than 0.01 lx, BW: 0.003 lx (F1.3, Maximum shutter : Max. : Off (1/30s), Gain : On(High)) Color: less than 0.0007 lx, BW 0.0002 lx (F1.3, Maximum shutter : Max.: Max. 16/30s, Gain:On(High))*1
	IR LED Light		Off/Auto(High/Mid/Low)
	IR LED irradiation distance		Approx. 30 m {98.43 feet}
	White Balance		AWC (2,000 ~ 10,000 K), ATW1 (2,700 ~ 6,000 K), ATW2 (2,000 ~ 6,000 K)
	Light Control Mode		Outdoor scene : Automatic integration of ALC and ELC Indoor scene [50 Hz] : Automatic integration of ALC and ELC with flickerless Indoor scene [60 Hz] : Automatic integration of ALC and ELC with flickerless
	Shutter Speed		[2 mega pixel [16:9](60 fps mode)/ 1.3 mega pixel [16:9](60 fps mode)] OFF(1/60), 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000,1/10000 Other than [2 mega pixel [16:9](60 fps mode)/ 1.3 mega pixel [16:9](60 fps mode)] OFF(1/30), 3/100, 3/120, 2/100, 2/120, 1/100, 1/120, 1/250,1/500, 1/1000, 1/2000, 1/4000, 1/10000
	Super Dynamic*2		On(High) / On(Normal) / Off
	Face Super Dynamic		ON / OFF (Only at Super Dynamic : ON)
	Adaptive Black Stretch		ON / OFF (Only when Super Dynamic OFF)
	Fog compensation		ON / OFF (Only when Super Dynamic/ Adaptive black stretch: Off)
	AGC		ON (LOW, MID, HIGH) / OFF
	Electronic Sensitivity UP		max. 1/1000 s, max. 1/500 s, max. 1/250 s, max. 1/100 s, max. 1/60 s, max. 1/30 s, max. 2/30 s, max. 4/30 s, max. 6/30 s, max. 10/30 s, max. 16/30 s
	Day & Night (IR)		Off/ On/ Auto1 (Normal)/ Auto2 (IR Light)/ Auto3 (SCC)
	Dynamic Range		133 dB typ. (Super Dynamic: ON, Light Control Mode : indoor)
	Digital Noise Reduction		High / Low
	Video Motion Detection		4 areas, Sensitivity : 15 steps, Detection size : 10 steps
	Privacy Zone		Up to 8 zones
	VIQS		Up to 8 zones
	Camera Title (OSD)		Up to 20 characters (alphanumeric characters, marks)
	Electric Zoom		TELE / WIDE , Auto Coarse adjustment of Focus
	Focus Adjustment		ABF / MANUAL(Html only)
	Lens Distortion Compensation		256 steps
Lens	Vari Focal Length		2.8 ~ 10mm {1/8 inches – 13/32 inches}
	Angular Field of View		WV-SFR631L [16 : 9 mode] Horizontal : 28.8° (TELE) – 102.9° (WIDE) Vertical : 16.0° (TELE) – 56.2° (WIDE) [4 : 3 mode] Horizontal : 23.8° (TELE) – 84.6° (WIDE) Vertical : 17.8° (TELE) – 62.6° (WIDE) WV-SFR611L [16 : 9 mode] Horizontal : 26.4° (TELE) – 94.0° (WIDE) Vertical : 14.7° (TELE) – 51.8° (WIDE) [4 : 3 mode] Horizontal : 26.4° (TELE) – 94.0° (WIDE) Vertical : 19.8° (TELE) – 69.5° (WIDE)
	Maximum Aperture Ratio		1 : 1.3 (WIDE) ~ 1 : 3.0 (TELE) *with Smart DOF (Depth of Field) mode
	Focusing Range		0.3 m ~ ∞
Adjusting Angle			Horizontal: ± 180°, Vertical: 0-85°, Image tilt adjustment range: -45°(Left) to +300°(Right)
Browser GUI	Cropping		H.264(1) / H.264(2) / H.264(3) / H.264(4) / H.264(all) / JPEG(1) / JPEG(2) / JPEG(3) Up to 4 image capture areas can be specified
	Camera Control		Brightness, AUX ON / OFF
	Display Mode		Spot, Quad : Image from 16 cameras can be displayed in 4 different Quad screens or 16 split screen (JPEG only). 20 characters camera title available.
	Digital Zoom		1x, 2x, 4x controlled by browser GUI
	Camera Title		Up to 20 alphanumeric characters
	Clock Display		Time : 12H/24H, Date : 5 formats on the browser, Summer time (Manual)
	Alarm Control		Reset
	One Shot Capture		A still picture will be displayed on a newly opened window.
	Audio		Mic (Line) Input : ON / OFF Volume adjustment : Low / Middle / High, Audio Output : ON / OFF Volume adjustment : Low / Middle / High
	SD Memory Data Download		Still or motion Images recorded in the SDXC/SDHC/SD memory card can be downloaded.
	GUI / Setup Menu Language		English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese
	System Log		Up to 100 (Internal) Up to 4,000 (SDXC/SDHC/SD memory when the recording format is set to JPEG.) error logs
	Supported OS *3		Microsoft® Windows® 8, Microsoft® Windows® 7, Microsoft® Windows Vista®
	Supported Browser		Windows® Internet Explorer® 10.0 (32 bit), Windows® Internet Explorer® 9.0 (32 bit) Windows® Internet Explorer® 8.0 (32 bit), Windows® Internet Explorer® 7.0 (32 bit)
Network	Network IF		10Base-T / 100Base-TX, RJ-45 connector
	Image Resolution	Image Capture Mode: 2 mega pixel [16:9] (30/60 fps)	WV-SFR631L : 1,920 x 1,080 / 1,280 x 720 / 640 x 360 / 320 x 180 / 160 x 90
		Image Capture Mode: 2 mega pixel [4:3] (30fps)	WV-SFR631L : 1,600 x 1,200 / 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240 / 160 x 120
		Image Capture Mode: 3 mega pixel [4:3] (30fps)	WV-SFR631L : 2,048 x 1,536* / 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240 / 160 x 120 *Used by super resolution techniques
		Image Capture Mode: 1.3 mega pixel [16:9] (30/60fps)	WV-SFR611L : 1,280 x 720 / 640 x 360 / 320 x 180 / 160 x 90
		Image Capture Mode: 1.3 mega pixel [4:3] (30fps)	WV-SFR611L : 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240 / 160 x 120
	H.264 *4	Transmission Mode	Constant bitrate / Framerate priority / Best effort / Advanced VBR
		Frame Rate	1 / 3 / 5 / 7.5 / 10 / 12 / 15 / 20 / 30 / 60 fps
		Bit Rate/Client	64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 / 6,144 / 8,192 / 10,240 / 12,288 / 14,336 / 16,384 / 20,480 / 24,576 kbps
		Image Quality	LOW / NORMAL / FINE
		Refresh interval	0.2 / 0.25 / 0.33 / 0.5 / 1 / 2 / 3 / 4 / 5s
		Transmission Type	UNICAST / MULTICAST
	JPEG	Image Quality	10 steps
		Refresh interval	0.1 fps - 30 fps (JPEG frame rate will be restricted when displaying both JPEG and H.264 images.)
		Transmission Type	PULL / PUSH
	Audio Compression		G.726 (ADPCM) 32 kbps / 16 kbps, G.711 64 kbps / AAC-LC
	Audio Mode		OFF / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex)
	Authentication for Audio		Level 1 only / Level 2 higher / All users
	Total Bit Rate		64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimited
	Supported Protocol		IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, RTP, MLD, ICMP, ARP IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP,FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP

Network	FTP Client	Alarm image transmission, FTP periodic transmission (When the FTP transmission is failed, backup on an optional SDXC/SDHC/SD memory card is available.)
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)
	SDXC/SDHC/SD Memory Card (Option) * Manufactured by Panasonic (SD speed class 4 or higher) * Use the SD memory card that complies with UHS-1 (Ultra High Speed-1) in the case of SD Speed Class 10.	H.264 recording : Manual REC / Alarm REC (Pre/Post) / Schedule REC/ Backup upon network failure Compatible (JPEG only) 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*, 64GB** model *SDHC card, ** SDXC card (except miniSD card and microSD card)
	Employment of two SD cards	Dual Recording for Redundancy Series Recording for long time
	Cellular Phone Compatibility	JPEG image, AUX control (by access level)
	Mobile Terminal Compatibility	iPad, iPhone, iPod touch (iOS 4.2.1 or later), Android™ Terminal
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
	Alarm Log	With SDXC/SDHC/SD memory card : Up to 50,000 logs for each SD memory card
	Schedule	Alarm / VMD / Access permission / H.264 recording / Scene file
Input/ Output	Monitor Output (for adjustment)	VBS : 1.0 V [p-p]/75 Ω, NTSC / PAL composite, ø3.5mm mini jack MONITOR OUT conversion plug included
	Microphone/Line Input	MIC IN and Line IN are selectable. ø3.5 mm monaural mini jack (monaural input) (Applicable microphone: Plug-in power type) Supply voltage: 2.5 V ±0.5 V Input impedance: Approx. 2 kΩ (unbalanced)
	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, ALARM IN 2/ALARM OUT, ALARM IN 3/AUX OUT
General	Safety	UL (UL60950-1), C-UL (CAN/CSA C22.2 No.60950-1), CE, IEC60950-1
	EMS	FCC (Part15 ClassA), ICES003 ClassA, EN55022 ClassB, EN55024
	Power Source and Power Consumption	When IR LED is ON WV-SFR631L DC power supply: 12 V DC/760 mA/Approx. 9.1 W PoE Device: 48 V DC/240 mA/Approx. 11.1 W (Class 0 device) WV-SFR611L DC power supply: 12 V DC/690 mA/Approx. 8.2 W PoE Device: 48 V DC/200 mA/Approx. 9.4 W (Class 0 device) * ONLY CONNECT 12 V DC CLASS 2 POWER SUPPLY.
	Ambient Operating Temperature	-10°C ~ +50°C (14 °F ~ 122 °F)
	Ambient Operating Humidity	20 ~ 90 % (no condensation)
	Shock Resistance	Compliant with 20J IEC60068-2-75/ IEC 62262 IK10
	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. 0.76kg {1.68 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 60fps mode.
*3 Refer to "Notes on Windows Vista® / Windows® 7 / Windows® 8" on the provided CD-ROM for further information about system requirements for a PC and precautions when using Microsoft® Windows® 8 or Microsoft® Windows® 7 or Microsoft® Windows Vista®.
*4 Transmission for 4 streams can be individually set.

Part Names and Functions

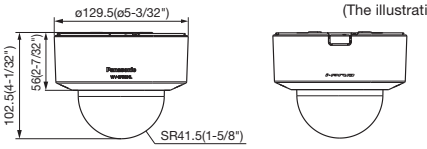
(The illustrations are WV-SFR631L.)



* Depending on the scanning application used, the Data Matrix may not be able to be read correctly. In this case, access the site by directly entering the following URL.
http://security.panasonic.com/pss/security/support/qr_sp_select.html

Appearance

(The illustrations are WV-SFR631L.)



Unit: mm (inches)

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Important
– Safety Precaution: Carefully read the Important Information, Installation Guide and operating instructions before using this product.
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• Masses and dimensions are approximate. • Specifications are subject to change without notice.

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