



### HD/1,280 x 960 H.264 Network Camera with 2x Extra Zoom (WV-SP105) VGA/640 x 480 H.264 Network Camera (WV-SP102)

#### Key Features

- 720p HD images up to 30 fps (WV-SP105 only)
- Newly developed 1.3 Megapixel high sensitivity MOS Sensor (WV-SP105)
- Newly developed 0.32 Megapixel high sensitivity MOS Sensor (WV-SP102)
- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording by "UniPhier<sup>®</sup>", Panasonic's proprietary System LSI platform.
- Full frame (Up to 30 fps) transmission at 1,280 x 960 image size (WV-SP105)
- Full frame (Up to 30 fps) transmission at VGA (640 x 480) image size (WV-SP102)
- 2x extra zoom under VGA resolution (WV-SP105 only)
- 2x, 4x digital zoom controlled by browser
- ABS (Adaptive Black Stretch) technologies deliver wider dynamic range compared with conventional cameras.
- High sensitivity with Simple Day/Night function:  
0.8 lx (Color), 0.4 lx (B/W) at F2.2 (WV-SP105)  
2.0 lx (Color), 1.3 lx (B/W) at F2.0 (WV-SP102)
- Digital Noise Reduction: 3D-DNR ensures noise reduction in various conditions.
- Progressive scan ensures clear images with less motion blur and no tearing even when the subject is moving.
- Superior color reproduction by primary (RGB) color filter
- Electronic sensitivity enhancement:  
Auto (Up to 16x) / OFF (WV-SP105)  
Auto (Up to 8x) / OFF (WV-SP102)
- Selectable light control modes: Indoor scene (50 Hz) / Indoor scene (60 Hz) / ELC (maximum exposure time)  
Indoor scene (50 Hz/60Hz): Flicker caused by fluorescent lightning will be automatically compensated.  
ELC (maximum exposure time): The lightning control will be automatically performed by adjusting shutter speed in the range of ELC.
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Meta data for VMD is supplied to work with the WJ-ND400 playback VMD function.

- Privacy Zone can mask up to 2 private areas, such as house windows and entrances/exits.
- Camera title display: Up to 20 alphanumeric characters on the browser, Up to 16 alphanumeric characters embedded in the image
- Alarm sources including VMD and Panasonic alarm command can trigger actions such as FTP image transfer, E-mail notification, Indication on browser, and Panasonic protocol output.
- 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.
- 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 GUI and setup menu: English, French, Italian, Spanish, German, Russian (PAL) / English, French (NTSC) \* Installation required except for English
- IPv4/IPv6 protocol supported

#### Standard Accessories

- |                           |       |   |       |
|---------------------------|-------|---|-------|
| • CD-ROM*1 .....          | 1 pc. | • Washer .....                          | 1 pc. |
| • Installation Guide..... | 1 pc. | • Spring Washer.....                    | 1 pc. |
| • Code Label*2 .....      | 1 pc. | • Sticker (over the tripod screw) ..... | 1 pc. |

The followings are for installation.

- |                               |       |
|-------------------------------|-------|
| • Power Cord Plug.....        | 1 pc. |
| • Angle Adjustment Cover..... | 1 pc. |
| • Safety Wire .....           | 1 pc. |

\*1 The CD-ROM contains the operating instructions (PDFs) and different kinds of tool software programs.

\*2 This label may be required for network management. The network administrator shall retain the code label.

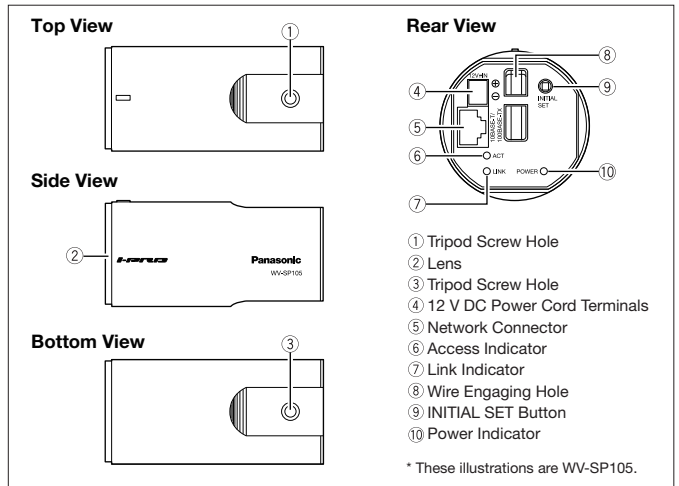
# Specifications

TV System	NTSC	PAL		
<b>Camera</b>	Image Sensor	WV-SP105: 1/3 type MOS Sensor WV-SP102: 1/5 type MOS Sensor		
	Effective Pixels	WV-SP105: Approx. 1.3 megapixel WV-SP102: Approx. 0.32 megapixel		
	Scanning Mode	Progressive scan		
	Scanning Area	WV-SP105: 4.8 mm (H) x 3.6 mm (V) WV-SP102: 2.69 mm (H) x 2.02 mm (V)		
	Minimum Illumination	WV-SP105: Color: 0.8 lx, B/W: 0.4 lx at F2.2 (Shutter: 1/30 s, AGC: High), Color: 0.05 lx, B/W: 0.03 lx at F2.2 (Shutter: 16/30 s, AGC: High) WV-SP102: Color: 2.0 lx, B/W: 1.3 lx at F2.0 (Shutter: 1/30 s, AGC: High), Color: 0.3 lx, B/W: 0.16 lx at F2.0 (Shutter: 8/30 s, AGC: High)		
	White Balance	AWC (2,000 - 10,000 K), ATW1 (2,700 - 6,000 K), ATW2 (2,000 - 6,000 K)		
	Light Control Mode	Indoor [50 Hz]: Automatic integration of ELC (up to 1/100 s) Indoor [60 Hz]: Automatic integration of ELC (up to 1/120 s) ELC (maximum exposure time): WV-SP105: 1/30, 3/100, 3/120, 2/100, 2/120, 1/100, 1/120, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000 WV-SP102: 1/30, 3/100, 3/120, 2/100, 2/120, 1/100, 1/120, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/8,000		
	Adaptive Black Stretch	ON / OFF		
	AGC	ON (LOW, MID, HIGH) / OFF		
	Electronic Sensitivity UP	WV-SP105: OFF, max. 2/30 s, max. 4/30 s, max. 6/30 s, max. 10/30 s, max. 16/30 s WV-SP102: OFF, max. 2/30 s, max. 3/30 s, max. 4/30 s, max. 8/30 s		
	Simple Day/Night Mode	AUTO / OFF		
	Digital Noise Reduction	High / Low		
	Video Motion Detection	4 areas, Sensitivity: 15 steps, Detection size: 10 steps		
	Privacy Zone	Up to 2 zones, Gray		
	Camera Title (OSD)	Up to 16 alphanumeric characters		
<b>Lens</b>	Zoom Ratio	WV-SP105: 2x with extra zoom (under VGA) WV-SP102: N/A		
	Digital (Electronic) Zoom	4x (Max. 8x combined with extra zoom under VGA (WV-SP105 only))		
	Focal Length	WV-SP105: 3.54 mm WV-SP102: 2.00 mm		
	Maximum Aperture Ratio	WV-SP105: 1 : 2.2 WV-SP102: 1 : 2.0		
	Focusing Range	0.5 m ~ ∞		
Angular Field of View	WV-SP105: H: 70.3°, V: 55.4° WV-SP102: H: 66.9°, V: 52.3°			
<b>Browser GUI</b>	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.		
	Camera Title	Up to 20 alphanumeric characters		
	Clock Display	Time: 12H / 24H, Date: 5 formats on the browser, Summer time (In/Out)		
	One Shot Capture	A still picture will be displayed on a newly opened window.		
	GUI/Setup Menu Language	English, French (Installation required for French)	English, French, Italian, Spanish, German, Russian (Installation required except for English)	
	System Log	Up to 100 (Internal)		
	Supported OS	Microsoft® Windows® 7 Professional 64 bit/32 bit, Microsoft® Windows Vista® Business SP1 32 bit, Microsoft® Windows® XP Professional SP3 The language of the OS must be same as selected GUI language.		
	Supported Browser	Windows® Internet Explorer® 8.0 (Microsoft® Windows® 7 Professional 64 bit/32 bit), Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business SP1 32 bit), Microsoft® Internet Explorer® 6.0 SP3 (Microsoft® Windows® XP Professional SP3)		
	<b>Network</b>	Network IF	10Base-T / 100Base-TX, RJ-45 connector	
		Image Resolution *1	Aspect ratio: [4 : 3]	WV-SP105: H.264: 1,280 × 960 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps JPEG (M-JPEG): 1,280 × 960 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA (320 × 240), up to 30 fps JPEG (M-JPEG): VGA (640 × 480) / QVGA (320 × 240), up to 30 fps
		Aspect ratio: [16 : 9]	WV-SP105: H.264: 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps JPEG (M-JPEG): 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps WV-SP102: H.264: 640 × 360 / 320 × 180, up to 30 fps JPEG (M-JPEG): 640 × 360 / 320 × 180, up to 30 fps	
H.264		Transmission Priority	Constant bitrate / Framerate	
		Frame Rate	1 / 3 / 5 / 7.5 / 10 / 15 / 20 / 30 fps   1 / 3 / 5 / 7.5 / 10 / 12 / 15 / 20 / 30 fps	
		Bit Rate/Client	64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 / 8,192* kbps / Unlimited * Only for WV-SP105	
		Image Quality	LOW / NORMAL / FINE	
		Refresh Interval	0.2 s / 0.33 s / 0.5 s / 1 s / 2 s / 3 s / 4 s / 5 s	
		Transmission Type	UNICAST / MULTICAST	
JPEG (M-JPEG)		Image Quality	0 SUPER FINE / 1 FINE / 2 / 3 / 4 / 5 NORMAL / 6 / 7 / 8 / 9 LOW (10 steps: 0-9)	
	Transmission Type	PULL / PUSH		
	Total Bit Rate	64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimited		

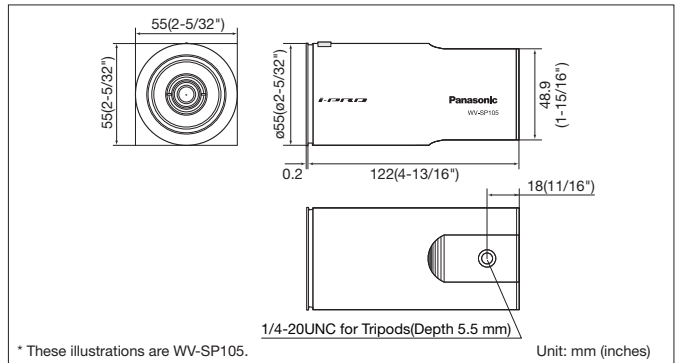
TV System	NTSC	PAL	
<b>Network</b>	Supported Protocol	IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP, IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTMP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP	
	FTP Client	Alarm image transfer, Periodic image transfer	
<b>Alarm</b>	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)	
	Alarm Source	VMD, Command alarm	
<b>General</b>	Alarm Actions	E-mail notification, Indication on browser, FTP image transfer, Panasonic protocol output	
	Schedule	VMD/Access permission	
<b>Power Source/Consumption</b>	Safety/EMC Standard	UL (UL60950), FCC (Part15 ClassA), C-UL (CAN/CSA C22.2 No.60950), DOG (ICES003 ClassA)	CE (EN60950, EN55022 ClassB, EN55024), GOST (GOST R 51558)
	Power Source/Consumption	WV-SP105: 12 V DC: approx. 200 mA, PoE: approx. 2.8 W (IEEE802.3af compliant, Class 2 device) WV-SP102: 12 V DC: approx. 140 mA, PoE: approx. 2.0 W (IEEE802.3af compliant, Class 2 device)	
<b>Ambient Operating Temperature/Humidity</b>	Ambient Operating Temperature/Humidity	0 °C ~ +40 °C (32 °F ~ 104 °F), 90 % or less (without condensation)	
	Dimensions	55 mm (W) x 55 mm (H) x 122 mm (D) (2-5/32" (W) x 4-13/16" (H) x 4-13/16" (D)) (excluding connectors/terminals)	
<b>Mass (approx.)</b>	WV-SP105: 180 g (0.40 lbs.) WV-SP102: 170 g (0.38 lbs.)		

\*1 [4 : 3] and [16 : 9] are alternative.

## Part Names and Functions



## Appearance



### Trademarks and registered trademarks

- Microsoft, and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.
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### Important

- Safety Precaution: carefully read the operating instructions and installation manual before using this product.
- Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.

- All TV pictures are simulated.
- Masses and dimensions are approximate.
- Specifications are subject to change without notice.
- These products may be subject to export control regulations.
- All product pictures are NTSC models.

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