

# WV-SP105 Network Camera WV-SP102



## 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 at 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)
- VIQS (Variable Image Quality on Specified area) technology allows the designated area 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.
- 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 20 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: English / Italian / French / German / Spanish / Russian / Chinese / Japanese
- IPv4/IPv6 protocol supported
- Supports DDNS (viewnetcam, RFC2136)
- Still images (JPEG) can be viewed on mobile phones via Internet.
- ONVIF compliant model

#### **Standard Accessories**

CD-ROM*1	Washer
The followings are for installation.	*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.

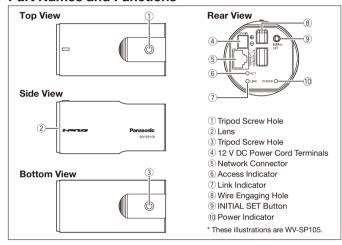
#### Specifications

TV Systen	n		NTSC PAL		
Camera	Image Sen	sor	WV-SP105: 1/3 type MOS Sensor		
			WV-SP102: 1/5 type MOS Sensor		
	Effective P	ixels	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 II	lumination	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		
		lack 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				
	Digital Noise Reduction		High / Low		
	Video Motion Detection		4 areas, Sensitivity: 15 steps, Detection size: 10 steps		
	Privacy Zo	ne	Up to 2 zones, Gray		
	VIQS		ON / OFF		
	Camera Tit		Up to 20 alphanumeric characters		
Lens	Zoom Ratio		WV-SP105: 2x with extra zoom (at VGA) WV-SP102: N/A		
	Digital (Electronic) Zoom		4x (Max. 8x combined with extra zoom at 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°		
Browser	Display Mode		Spot, Quad: Image from 16 cameras can be displayed in 4 different Quad		
GUI	O T''		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 (Auto / Manua		
	One Shot Capture		A still picture will be displayed on a newly opened window.		
	GUI/Setup Menu		English, Italian, French, German, Spanish, Russian, Chinese,		
	Language		Japanese		
	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		
	Owner and and Discourses		The language of the OS must be same as selected GUI language Windows® Internet Explorer® 9.0 (32 bit),		
	Supported Browser				
			Windows® Internet Explorer® 8.0 (32 bit),		
			Windows® Internet Explorer® 7.0 (32 bit),		
Noture:	Notwork IF		Microsoft® Internet Explorer® 6.0 SP3  10Base-T / 100Base-TX, RJ-45 connector		
Network	Network IF	Aspect ratio:	WV-SP105:		
	Image Resolution		H.264: 1,280 × 960 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps		
	*1	[4.0]	JPEG (MJPEG): 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 (MJPEG): VGA (640 × 480) / QVGA (320 × 240), up to 30 fps		
		Aspect ratio:	WV-SP105:		
		[16:9]	H.264: 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps		
		[10.0]	JPEG (MJPEG): 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps		
			WV-SP102:		
			H.264: 640 × 360 / 320 × 180, up to 30 fps		
			JPEG (MJPEG): 640 × 360 / 320 × 180, up to 30 fps		
	H.264	Transmission Drivet			
	n.204	Transmission Priority	Constant bitrate / Framerate/ Best effort		
	1	Frame Rate	1/3/5/7.5/10/12/15/20/30 fps		
		Bit Rate/Client			
			4,096 / 8,192* kbps / Unlimited * Only for WV-SP105		
		Image Quality	4,096 / 8,192* kbps / Unlimited * Only for WV-SP105 LOW / NORMAL / FINE		
		Image Quality Refresh Interval	4,096 / 8,192* kbps / Unlimited * Only for WV-SP105 LOW / NORMAL / FINE 0.2 s / 0.25s / 0.33 s / 0.5 s / 1 s / 2 s / 3 s / 4 s / 5 s		
	IDEO	Image Quality Refresh Interval Transmission Type	4,096 / 8,192* kbps / Unlimited * Only for WV-SP105 LOW / NORMAL / FINE 0.2 s / 0.25s / 0.33 s / 0.5 s / 1 s / 2 s / 3 s / 4 s / 5 s UNICAST / MULTICAST		
	JPEG (MJPEG)	Image Quality Refresh Interval Transmission Type Image Quality	LOW/NORMAL/FINE 0.2 s/0.25s/0.33 s/0.5 s/1 s/2 s/3 s/4 s/5 s		

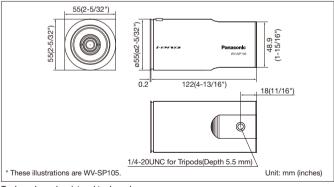
TV System		NTSC	PAL	
Network	Supported Protocol	IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6,ICMPv6		
		IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS,		
		DDNS, NTP, SNMP, UPnP,IGMP,ICMP,ARP		
	FTP Client	Alarm image transfer, Periodic image transfer		
	No. of Simultaneous Users	Jp to 14 users (Depends on network conditions)		
	Face Detection	ON / OFF (with XML notification) / JPEG image		
	Cellular Phone Compatibility			
	Mobile Terminal Compatibility*2	iPad, iPhone, iPod touch (iOS 4.2.1 or later), Android™ mobile terminals		
Alarm	Alarm Source	VMD, Command alarm		
	Alarm Actions	E-mail notification, Indication on browser,		
		FTP image transfer, Panasonic protocol output		
	Schedule	VMD/Access permission		
General	Safety/EMC Standard	afety/EMC Standard UL (UL60950), FCC (Part15 ClassA), CE (EN60950, EN55022 Clas		
		C-UL (CAN/CSA C22.2 No.60950),	EN55024), GOST (GOST R 51558)	
		DOC (ICES003 ClassA)		
	Power Source/	WV-SP105:		
	Consumption	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)		
	Ambient Operating	0 °C ~ +40 °C (32 °F ~ 104 °F),		
	Temperature/Humidity	90 % or less (without condensation)		
	Dimensions	55 mm (W) x 55 mm (H) x 122 mm (D) (2-5/32" (W) x 2-5/32" (H) x 4-13/16" (D))		
		(excluding connectors/terminals)		
	Mass (approx.)	WV-SP105: 180 g (0.40 lbs.) WV-SP102: 170 g (0.38 lbs.)		

<sup>\*1 [4:3]</sup> and [16:9] are alternative. \*2 For further information about compatible devices, refer to our website (http://panasonic.net/pss/security/support/info.html).

#### **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.

   iPad, iPhone and iPod touch are registered trademarks of Apple Inc.

   UniPhier is a registered trademark of Panasonic Corporation.

   "Super Dynamic", "SDII", "SDII", "SDS", "SDSLink", "i-PRO" and "i-PRO SmartHD" logos are trademarks or registered trademarks of Panasonic Corporation.

   ONVIF and the ONVIF logo are trademarks of ONVIF Inc.

#### 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.

**DISTRIBUTED BY:** 

Total Bit Rate

(MJPEG) Transmission Type PULL / PUSH

64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimited

