

# 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®", 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	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.

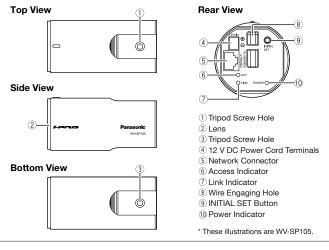
### Specifications

TVC	ficatio				
TV System	1		NTSC	PAL	
Camera	Image Sen	sor	WV-SP105: 1/3 type MOS Sens	or	
			WV-SP102: 1/5 type MOS Sens	or	
	Effective P	ixels	WV-SP105: Approx. 1.3 megapi		
			WV-SP102: Approx. 0.32 megaj		
	Scanning N	/lode	Progressive scan		
	Scanning A		WV-SP105: 4.8 mm (H) x 3.6 mm (V)		
	ocarring A	u ca			
			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 Bala	nce	AWC (2,000 ~ 10,000 K), ATW1 (2,700 ~ 6,000 K), ATW2 (2,000 ~ 6,000 K)		
			Indoor [50 Hz]: Automatic integration of ELC (up to 1/100 s)		
	Light Control Mode				
			Indoor [60 Hz]: Automatic integration of ELC (up to 1/120 s)		
			ELC (maximum exposure time):		
			WV-SP105:		
			OFF (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:		
			OFF (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 D	lack Stretch	ON / OFF	=1===	
	<u> </u>	LON OUBLOIT			
	AGC	D	ON (LOW, MID, HIGH ) / OFF		
	Electronic S	Sensitivity UP	WV-SP105:		
			OFF, max. 2/30 s, max. 3/30 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		
		se Reduction	High / Low		
		on Detection	9		
	Privacy Zo		Up to 2 zones, Gray / Mosaic	0.000.011 0.20. 10 0.000	
				wa.	
	Camera Tit		Up to 16 alphanumeric characte		
_ens	Zoom Ratio		WV-SP105: 2x with extra zoom (under VGA) WV-SP102: N/A		
	Digital (Electronic) Zoom				
	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 Mo		Spot, Quad: Image from 16 cameras can be displayed in 4 different Quad		
GUI					
uo.			screens or 16 split screen (JPEG only). 20 characters camera title available. Up to 20 alphanumeric characters		
			· · · · ·		
	Clock Display		Time: 12H / 24H, Date: 5 formats on the browser, Summer time (Manual/AUTO)		
	One Shot Capture		A still picture will be displayed of		
	GUI/Setup	Menu	English, French	English, French, Italian, Spanish,	
	Language		(Installation required for French)	German, Russian (Installation	
				required except for English)	
	System Lo	g	Up to 100 (Internal)		
	Supported	os	Microsoft® Windows® 7 Profess	sional 64 bit/32 bit,	
			Microsoft® Windows Vista® Business SP1 32 bit,		
			Microsoft® Windows® XP Profes		
	Cumrt . 1	Drawa - ::	The language of the OS must be same as selected GUI language. Windows® Internet Explorer® 8.0 (Microsoft® Windows® 7 Professional 64 bit/32 bit),		
	Supported	prowser			
			Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business SP1 32 bit),		
	Microsoft® Internet Explorer® 6.0 SP3 (Microsoft® Windows® XP Profe				
			Microsoft® Internet Explorer® 6.0 SP3 (Microsoft® Interne	crosoft® Windows® XP Professional SP3)	
Network	Network IF			crosoft® Windows® XP Professional SP3)	
Network	Network IF	Aspect ratio:	Microsoft® Internet Explorer® 6.0 SP3 (Microsoft® Interne	crosoft® Windows® XP Professional SP3)	
Network		Aspect ratio:	Microsoft <sup>®</sup> Internet Explorer <sup>®</sup> 6.0 SP3 (Microsoft <sup>®</sup> 10Base-T / 100Base-TX, RJ-45	crosoft® Windows® XP Professional SP3) connector	
Network	Image	Aspect ratio:	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48	crosoft® Windows® XP Professional SP3) connector 0) / QVGA (320 × 240), up to 30 fps	
Network	Image Resolution	Aspect ratio:	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V	crosoft® Windows® XP Professional SP3) connector 0) / QVGA (320 × 240), up to 30 fps	
Network	Image Resolution	Aspect ratio:	Microsoft <sup>®</sup> Internet Explorer <sup>®</sup> 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps	crosoft® Windows® XP Professional SP3) connector 0) / QVGA (320 × 240), up to 30 fps	
Network	Image Resolution	Aspect ratio:	Microsoft <sup>®</sup> Internet Explorer <sup>®</sup> 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102:	crosoft® Windows® XP Professional SP3) connector 0) / QVGA (320 × 240), up to 30 fps //GA (640 × 480) /	
Network	Image Resolution	Aspect ratio:	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 )PEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA	crosoft® Windows® XP Professional SP3) connector 0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) / (320 × 240), up to 30 fps	
Network	Image Resolution	Aspect ratio: [4:3]	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480)	crosoft® Windows® XP Professional SP3) connector 0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) / (320 × 240), up to 30 fps	
Network	Image Resolution	Aspect ratio: [4:3]  Aspect ratio:	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105:	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps //GA (640 × 480) /  (320 × 240), up to 30 fps // QVGA (320 × 240), up to 30 fps	
Network	Image Resolution	Aspect ratio: [4:3]	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps //GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps	
Network	Image Resolution	Aspect ratio: [4:3]  Aspect ratio:	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105:	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps //GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps	
Network	Image Resolution	Aspect ratio: [4:3]  Aspect ratio:	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps //GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps	
Network	Image Resolution	Aspect ratio: [4:3]  Aspect ratio:	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps / 320 × 180, up to 30 fps 10 × 360 / 320 × 180, up to 30 fps	
Network	Image Resolution	Aspect ratio: [4:3]  Aspect ratio:	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP105: H.264: 640 × 360 / 320 × 180, up	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps	
Network	Image Resolution *1	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP102: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps	
Network	Image Resolution	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP105: H.264: 640 × 360 / 320 × 180, up	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps	
Network	Image Resolution *1	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission Mode	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP102: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320 Constant bitrate / Framerate pri	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  . (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps to 30 fps × 180, up to 30 fps ority	
Network	Image Resolution *1	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission Mode Frame Rate	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP105: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320 Constant bitrate / Framerate pri	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps ority  1/3/5/7.5/10/12/15/20/30 fps	
Network	Image Resolution *1	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission Mode Frame Rate	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP102: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320 Constant bitrate / Framerate pri	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps ority  1/3/5/7.5/10/12/15/20/30 fps	
Network	Image Resolution *1	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission Mode Frame Rate	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP105: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320 Constant bitrate / Framerate pri	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps ority  1/3/5/7.5/10/12/15/20/30 fps / 1,024 / 1,536 / 2,048 / 3,072 /	
Network	Image Resolution *1	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission Mode Frame Rate Bit Rate/Client	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP102: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320 Constant bitrate / Framerate pri	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps ority  1/3/5/7.5/10/12/15/20/30 fps / 1,024 / 1,536 / 2,048 / 3,072 /	
Network	Image Resolution *1	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission Mode Frame Rate Bit Rate/Client Image Quality	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP102: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/30 fps 64 / 128 / 256 / 384 / 512 / 76 4,096 / 8,192* kbps / Unlimited LOW / NORMAL / FINE	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps ority  1/3/5/7.5/10/12/15/20/30 fps / 1,024 / 1,536 / 2,048 / 3,072 /	
Network	Image Resolution *1	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission Mode Frame Rate Bit Rate/Client Image Quality Refresh Interval	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP102: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/30 fps 64 / 128 / 256 / 384 / 512 / 768 4,096 / 8,192* kbps / Unlimited LOW / NORMAL / FINE 0.1 fps ~ 30 fps	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps ority  1/3/5/7.5/10/12/15/20/30 fps / 1,024 / 1,536 / 2,048 / 3,072 /	
Network	Image Resolution *1	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission Mode Frame Rate Bit Rate/Client Image Quality Refresh Interval Transmission Type	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP102: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/30 fps 64 / 128 / 256 / 384 / 512 / 768 4,096 / 8,192' kbps / Unlimited LOW / NORMAL / FINE 0.1 fps ~ 30 fps UNICAST / MULTICAST	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps ority  1/3/5/7.5/10/12/15/20/30 fps / 1,024 / 1,536 / 2,048 / 3,072 / * Only for WV-SP105	
Network	Image Resolution *1 H.264	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission Mode Frame Rate Bit Rate/Client Image Quality Reffresh Interval Transmission Type Image Quality	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V CVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) JPEG (M-JPEG): VGA (640 × 360 JPEG (M-JPEG): 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 VV-SP102: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/30 fps 64 / 128 / 256 / 384 / 512 / 768 4,096 / 8,192* kbps / Unlimited LOW / NORMAL / FINE 0.1 fps ~ 30 fps UNICAST / MULTICAST 0 SUPER FINE / 1 FINE / 2 / 3 / 4 / 5 NO	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / 320 × 180, up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps ority  1/3/5/7.5/10/12/15/20/30 fps / 1,024 / 1,536 / 2,048 / 3,072 / * Only for WV-SP105	
Network	Image Resolution *1 H.264	Aspect ratio: [4 : 3]  Aspect ratio: [16 : 9]  Transmission Mode Frame Rate Bit Rate/Client Image Quality Refresh Interval Transmission Type Image Quality Transmission Type	Microsoft® Internet Explorer® 6.0 SP3 (Mi 10Base-T / 100Base-TX, RJ-45 WV-SP105: H.264: 1,280 × 960 / VGA (640 × 48 JPEG (M-JPEG): 1,280 × 960 / V QVGA (320 × 240), up to 30 fps WV-SP102: H.264: VGA (640 × 480) / QVGA JPEG (M-JPEG): VGA (640 × 480) WV-SP105: H.264: 1,280 × 720 / 640 × 360 JPEG (M-JPEG): 1,280 × 720 / 64 WV-SP102: H.264: 640 × 360 / 320 × 180, up JPEG (M-JPEG): 640 × 360 / 320 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/30 fps 64 / 128 / 256 / 384 / 512 / 768 4,096 / 8,192' kbps / Unlimited LOW / NORMAL / FINE 0.1 fps ~ 30 fps UNICAST / MULTICAST	crosoft® Windows® XP Professional SP3) connector  0) / QVGA (320 × 240), up to 30 fps /GA (640 × 480) /  (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps / QVGA (320 × 240), up to 30 fps 10 × 360 / 320 × 180, up to 30 fps to 30 fps × 180, up to 30 fps ority  1/3/5/7.5/10/12/15/20/30 fps / 1,024 / 1,536 / 2,048 / 3,072 / * Only for WV-SP105	

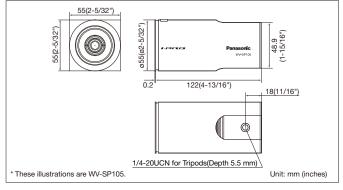
TV System		NTSC	PAL	
Network	twork   Supported Protocol   IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, N			
		IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP,		
		SMTP, DHCP, DNS, DDNS, NTP, SNMP		
	FTP Client	Alarm image transfer, Periodic image transfer		
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)		
Alarm	Alarm Source	VMD, Command alarm E-mail notification, Indication on browser,		
	Alarm Actions			
		FTP image transfer, Panasonic protocol output		
	Schedule	VMD/Access permission		
General	Safety/EMC Standard	UL (UL60950), FCC (Part15 ClassA),	CE (EN60950, EN55022 ClassB,	
		C-UL (CAN/CSA C22.2 No.60950),	EN55024), GOST (GOST R 51558)	
		DOC (ICES003 ClassA)		
	Power Source/	WV-SP105: 12 V DC: approx. 200 mA, PoE: approx. 2.8 W (IEEE802.3af compliant, Class 2 device)		
	Consumption			
		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	(excluding connectors/terminals)		
	Mass (approx.)			

<sup>\*1 [4:3]</sup> 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.
- UniPhiler is a registered trademark of Panasonic Corporation.
   "Super Dynamic", "SDII", "SDII", "SD5", "SD5Link", "i-PRO" and "i-PRO SmartHD" logos are trademarks or registered trademarks of Panasonic Corporation.
- 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:**



http://panasonic.net/security/