

NTSC WV-NW502S (12 V DC or PoE)

PAL WV-NW502S (12 V DC or PoE)



Megapixel H.264 Vandal Resistant Network Camera featuring Super Dynamic

Key Features

- H.264 High profile encoding with Panasonic UniPhier® LSI enables 1280 x 960 size 30 ips real time video stream with smaller data size.
- Megapixel Super Dynamic delivers 1280 x 960 image with superior dynamic range by fusion of 2.6 million pixels CCD and Super Dynamic DSP.
- 2.6 million pixels CCD delivers 2048 x 1538 outstanding image quality, allowing precise identification (3M mode, JPEG only).
- Three different types of streaming modes including JPEG and H.264(2ch) or MPEG4(2ch) can be transmitted simultaneously, enabling both real time monitoring and high quality recording.
- High sensitivity: 1.0 lux (Color), 0.08 lux (B/W) at F1.2 (Wide, 1.3 Megapixel mode)
- Day/Night feature automatically switches the camera from color to B/W depending on the illumination.
- ABF (Auto Back Focus) automatically adjusts back focus, allowing easy installation and accurate focus in both color and B/W mode.
- Adaptive DNR (Digital Noise Reduction): Integration of 2D-DNR and 3D-DNR allows noise reduction with less motion blur and resolution deterioration in various conditions.
- Progressive Video Output 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
- Selectable light control modes: Outdoor/Indoor/ELC/Fixed electronic shutter
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size.
- Meta data for VMD can be supplied to work with the Playback VMD Search function of Panasonic recorders (Specific model only).
- Face detection: Up to 8 faces can be detected and transferred as XML data, making possible to develop custom applications.
- Privacy Zone: Up to 8 areas can be masked when privacy is a concern.
- 2x, 4x digital zoom with Pan/Tilt control for zoomed area is available.
- Camera title display: Up to 20 alphanumeric characters on the browser, Up to 16 alphanumeric characters with three selectable character sizes embedded in the image
- Alarm sources including 3 terminal inputs, VMD and Panasonic alarm command can trigger actions such as SD/SDHC memory recording, Image quality change (JPEG). FTP image transfer, E-mail notification, Indication on browser, Terminal output, and Panasonic alarm command output.

- Multiscreen mode: Up to 16 cameras can be displayed on 4x Quad screens or 16 split screen. Pan/Tilt control is available in the Quad screens.
- Full duplex bi-directional audio allows interactive communication between camera site and monitoring site.
- SD/SDHC Memory card slot for manual recording, alarm recording, image backup upon network failure and log data.
- Priority Stream Mode: Up to two streams can be prioritized when multiple devices are accessing, allowing to maintain the frame rate of the recording or specific clients.
- Frame Rate Priority Mode dynamically controls bit rate and image quality depending on the subject to maintain the frame rate.
- Alarm log, Manual REC log, FTP error log saved in the SD/SDHC memory card can be viewed with the pop-up LOG window.
- Internet mode: H.264/MPEG-4 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
- Analog Monitor output for easier installation
- Vandal resistant and IP66 rated water and dust resistant.
- Dehumidification device for use in various weather conditions
- 2.8 ~ 8.0 mm, 2.8x Varifocal Auto Iris lens

Standard Accessories

• CD-ROM*1	1 pc.	• Base Cover	1 pc.
• Installation Guide	1 pc.	• Fixing Screws (M4 x 8 mm)	(1 piece of spare screw included) 5 pcs.
• Code Label*2	1 pc.	• Bit for tamperproof screw	1 pc.
The followings are for installation.		• Butyl tape	1 pc.
• 2P Power Cable	1 pc.	*1 The CD-ROM contains Panasonic IP Setup Software, viewer software "Network Camera View 4", and Operation Instructions (PDF).	
• 4P Alarm Cable	1 pc.	*2 This label may be required for network management. The network administrator shall retain the code label.	
• Camera Attachment	1 pc.		
• Mount Bracket	1 pc.		

Optional Accessories

Embedded Ceiling Mount Bracket
WV-Q169



Smoke Dome Cover
WV-CW4S



Specifications

TV System		NTSC	PAL	
Camera	Image Sensor	1/3 inch interline transfer CCD		
	Effective Pixels	2x (1,296 (H) x 976 (V), Bayer pattern) Total 2.6 Megapixels		
	Scanning Mode	Progressive scan		
	Scanning Area	4.86 mm (H) x 3.65 mm (V)		
	Minimum Illumination *1	1.3 Megapixel mode	Color: 1.0 lux, B/W: 0.08 lux at F1.2 (Shutter: 1/30 s, AGC: High, SD: OFF), Color: 0.06 lux, B/W: 0.005 lux at F1.2 (Shutter: 16/30 s, AGC: High, SD: OFF)	
		3 Megapixel mode	Color: 2.0 lux, B/W: 0.16 lux at F1.2 (Shutter: 1/30 s, AGC: High), Color: 0.12 lux, B/W: 0.01 lux at F1.2 (Shutter: 16/30 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	Outdoor: Automatic integration of ALC and ELC Indoor: Automatic integration of ALC and ELC (up to 3/100 sec.) ELC: (up to 1/10,000 sec.) (ELC: only at Super Dynamic: OFF)		
	Shutter Speed	Fix shutter: 3/100, 2/100, 1/100, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000 (Only at Super Dynamic: OFF)		
	Super Dynamic	ON (1.3 Megapixel mode only) / OFF (BLC is available at SD OFF)		
	Dynamic Range	52 dB typical (Super Dynamic: ON, Light Control mode: Indoor)		
	Adaptive Black Stretch	ON / OFF (Only at Super Dynamic: OFF)		
	AGC	ON (LOW, MID, HIGH) / OFF		
	Electronic Sensitivity UP	OFF / AUTO (Max. 2x (2/30 s), 4x (4/30 s), 6x (6/30 s), 10x (10/30 s), 16x (16/30 s))		
	Black and White Mode	Mode: AUTO1 / AUTO2 / AUTO3 / ON / OFF, Level: High / Low, with external control		
Digital Noise Reduction	High / Low			
Video Motion Detection	4 areas, Sensitivity: 15 steps, Detection size: 10 steps			
Privacy Zone	Up to 8 zones, Gray / Mosaic			
Up Side Down	ON / OFF			
Auto Image Stabilizer	ON / OFF			
Camera Title (OSD)	Up to 16 alphanumeric characters (3 selectable character sizes)			
Back Focus Adjustment	ABF / MANUAL, ABF mode upon CL/BW switching: AUTO / PRESET / FIX			
Vari Focal Length	2.8 mm - 8 mm			
Angular Field of View	H: 35.0 (Tele) - 100 (Wide), V: 26.2 (Tele) - 73.4 (Wide)			
Maximum Aperture Ratio	1 : 1.2 (Wide) - 1 : 1.8 (Tele)			
Focusing Range	0.3 m -			
Pan and Tilt	Panning Range: 170 Tiltng Range: 75 Azimuth Range: 100			
Browser GUI	Camera Control	Brightness, AUX ON / OFF, Zoom (1x, 2x, 4x)		
	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, Audio Output: ON / OFF		
	SD Memory Data Download	Images recorded in the SD memory card can be downloaded.		
	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), Up to 4,000 (SD memory) error logs		
	Supported OS	Microsoft® Windows Vista® Business SP1 32 bit, Microsoft® Windows® XP Home Edition/ Professional SP3, The language of the OS must be same as selected GUI language.		
	Supported Browser	Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business SP1 32 bit), Microsoft® Internet Explorer® 6.0 SP3 (Microsoft® Windows® XP Home Edition/Professional SP3)		
	Network	Network IF	10Base-T / 100Base-TX, RJ-45 connector	
		Image Resolution *2	1.3 Megapixel mode	H.264: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps MPEG-4: VGA (640 x 480) / QVGA (320 x 240), up to 30 fps JPEG: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps
3 Megapixel mode			H.264: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 15 fps MPEG-4: VGA (640 x 480) / QVGA (320 x 240), up to 15 fps JPEG: 2,048 x 1,536 / 1,280 x 960 / VGA (640 x 480), up to 15 fps	
H.264 / MPEG-4 *2		Transmission Priority	Constant bit rate / Frame rate	
		Max. Frame Rate	1 / 3 / 5 / 7.5 / 10 / 15 / 20* / 30* fps * 1.3 Megapixel mode only	
Image Quality		Max.	64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 / 8,192* kbps / Unlimited * H.264 mode only	
		Bit Rate/Client	LOW / NORMAL / FINE	
		Refresh Interval	0.2s/0.33s/0.5s/1s/2s/3s/4s/5s (1 frame interval)	
Transmission Type		UNICAST / MULTICAST		
JPEG		Image Quality	10 steps	
		Transmission Type	PULL / PUSH	
Audio Compression		G.726 (ADPCM) 32 kbps / 16 kbps		
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	IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP			
FTP Client	Alarm image transfer, Periodic image transfer, Active/Passive selectable (When the FTP periodic transmission is failed, backup on an optional SD/SDHC memory card is available.)			
No. of Simultaneous Users	Up to 14 users (Depends on network conditions)			
SD/SDHC Memory Card (Option)	Manual REC / Alarm REC / Backup upon network failure Compatible SD (SDHC) card: Panasonic 64 MB, 128 MB, 256 MB, 512 MB, 1 GB, 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB* model * SDHC card			

Trademarks and registered trademarks

- Microsoft, and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.
- UniPhier is a registered trademark of Panasonic Corporation.
- "Super Dynamic", "SDI", "SDII", "SD5", "SD5Link" and "i-Pro" logos are trademarks or registered trademarks of Panasonic Corporation.

Important

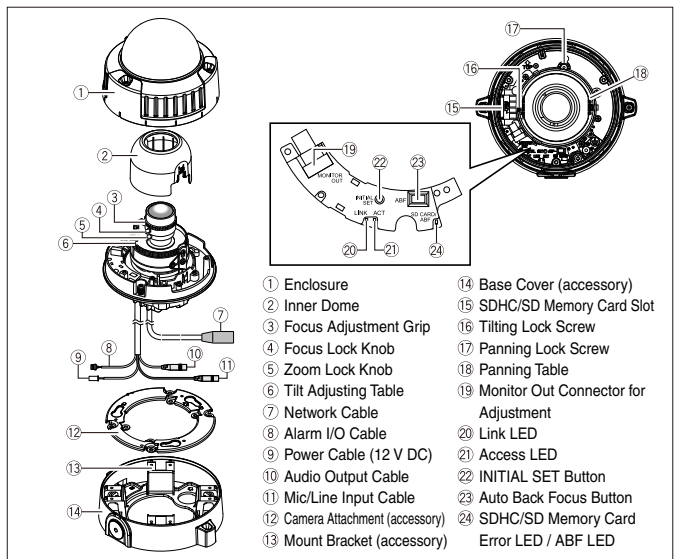
- Safety Precaution: carefully read the operating instructions and installation manual before using this product.
- Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.

DISTRIBUTED BY:

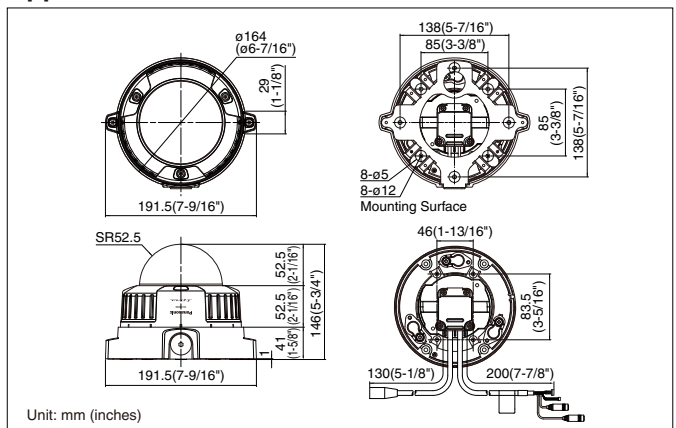
TV System		NTSC	PAL
Alarm	Alarm Source	3 terminal inputs, VMD, Command alarm	
	Alarm/Manual REC/ FTP error Log	5,000 logs(with SD/SDHC memory), Alarm log: 1,000 logs(without memory)	
	Alarm Actions	SD/SDHC memory recording, E-mail notification, Alarm terminal output, Indication on browser, FTP image transfer, Panasonic protocol output	
	Schedule	Alarm / VMD / Access permission	
Input / Output	Monitor Output	1.0 V [P-P] / 75 Ω, NTSC composite, RCA Jack	1.0 V [P-P] / 75 Ω, PAL composite, RCA Jack
	Microphone/Line Input (Cable)	MIC IN and Line IN are selectable. ø3.5 mm stereo mini jack (monaural input) (Applicable microphone: Plug-in power type) Supply voltage: 2.5 V 0.5 V Input impedance: approx. 2 k	
	Audio Output (Cable)	ø3.5 mm stereo mini jack (monaural output) Line level	
	External I/O Terminals (Cable)	ALARM IN 1 / DAY/NIGHT IN, ALARM IN 2 / ALARM OUT, ALARM IN 3 / AUX OUT / EXPOSURE OUT	
General	Safety/EMC Standard	UL (UL60065), FCC (Part15 ClassA), C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA)	CE (EN55022 ClassB, EN55024)
	Power Source and Power Consumption	12 V DC: 630 mA, PoE (IEEE 802.3af): 7.6 W	
	Ambient Operating Temperature/Humidity	-30 C ~ +50 C (-22 F ~ 122 F) *3, 90 % or less (without condensation)	
	Water and Dust Resistance	IP66, IEC60529 measuring standard compatible	
	Impact Protection	IEC 60068-2-75 test Eh, 50J	
	Dimensions	ø164 mm x 146 mm (H), 191.5 mm (W) (Base Cover) (ø6-7/16" x 5-3/4" (H), 7-9/16" (W) (Base Cover))	
	Weight (approx.)	1.8 kg (4.0 lbs.) (with Mounting Bracket)	

- *1 With standard Clear Dome Cover
- *2 H.264 and MPEG-4 are alternative.
- *3 When turning on the power at -10 C (14 F) or lower, warming up (at least 1 hour) is required before operation and setting.

Part Names and Functions



Appearance



Unit: mm (inches)

- All TV pictures are simulated.
- Weights 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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<http://panasonic.net/security/>

(WV-NW502S_SPEC_1.pdf)