Panasonic
ideas for life

Super Dynamic Megapixel Network Camera
WV-NP502

NTSC **WV-NP502** (12 V DC or PoE) PAL **WV-NP502** (12 V DC or PoE)

Megapixel H.264 Network Camera featuring *Super Dynamic*

Key Features

- 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 (1.3 Megapixel mode)
- ***Super Dynamic*** and ABS (Adaptive Black Stretch) technologies deliver 128x wider dynamic range compared to conventional cameras.
- Up to 3 Megapixel (2,048 x 1,536) JPEG stream (3 Megapixel mode, JPEG only)
- H.264 and MPEG-4 are selectable for system migration.
- High sensitivity with Day/Night function: 1.0 lux (Color), 0.08 lux (B/W) at F1.4 (1.3 Megapixel mode)
- ABF (Auto Back Focus) ensures easy installation and stable focus in both color and B/W modes.
- Adaptive Digital Noise Reduction: Integration of 2D-DNR and 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
- Selectable light control modes: Outdoor / Indoor / ELC / Fixed electronic shutter
  Outdoor / Indoor: Electronic shutter and ALC lens iris control are automatically controlled depending on the mode and luminance level.
  ELC: Up to 1/10,000 Electronic shutter is automatically applied for a fix iris lens.
  Fixed electronic shutter: Up to 1/10,000 fixed electronic shutter can be selectable.
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection detect the position of human face, the information is sent by XML or video stream.
- Meta data for VMD is supplied to work with the WJ-ND400 playback VMD function.
- Privacy Zone can mask up to 8 private areas, such as house windows and entrances/exits.
- 2x, 4x digital zoom controlled by browser
- 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 input, VMD and Panasonic alarm command can trigger actions such as SD/SDHC memory recording, FTP image transfer, E-mail notification, Indication on browser, Alarm terminal output, and Panasonic 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.
- SD/SDHC Memory card slot for manual recording, alarm recording and backup upon network failure.
- H.264/MPEG-4 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.
- Alarm log, Manual REC log, FTP error log saved in the SD/SDHC memory card is displayed on the browser GUI and can be downloaded to the client PC. Playback or Image data download through the log is also available.
- 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

Standard Accessories

- CD-ROM*1 ..... 1 pc.
- Installation Guide ..... 1 pc.
- Code Label*2 ..... 1 pc.

The followings are for installation.

- Power Cord Plug ..... 1 pc.
- Safety Wire Plate for Ceiling ..... 1 pc.
- Safety Wire Lug for Wall ..... 1 pc.
- Screws for Mounting Bracket (M2.5 x 8) ... 2 pcs.

*1 The CD-ROM contains Panasonic IP Setup Software,viewer software "Network Camera View 4", and Operation Instructions (PDF).
*2 This label may be required for network management. The network administrator shall retain the code label.

Optional Accessory

1/3 inch High Resolution 2x Varifocal Lens
WV-LZA62/2
(2.8 ~ 6 mm)
F1.4 (Wide)
F2.1 (Tele)

Specifications

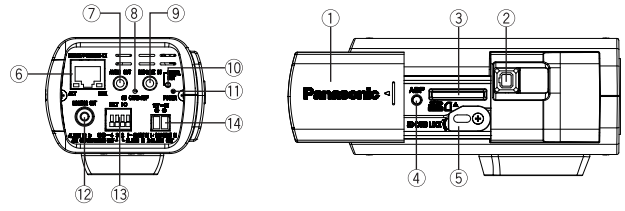
TV System		NTSC	PAL
Camera	Image Sensor	1/3 inch interline transfer CCD	
	Effective Pixels	1,296 (H) x 976 (V) x2	
	Scanning Mode	Progressive scan	
	Scanning Area	4.86 mm (H) x 3.65 mm (V)	
	Minimum Illumination	1. 3 Megapixel mode: Color: 1.0 lux, B/W: 0.08 lux at F1.4 (Shutter: 1/30 s, AGC: High, SD: OFF), Color: 0.06 lux, B/W: 0.005 lux at F1.4 (Shutter: 16/30 s, AGC: High, SD: OFF)	
		3 Megapixel mode: Color: 2.0 lux, B/W: 0.16 lux at F1.4 (Shutter: 1/30 s, AGC: High), Color: 0.12 lux, B/W: 0.01 lux at F1.4 (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 1/100 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 / OFF (1.3 Megapixel mode only)	
	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	
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*1	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 *1 — Transmission Priority	Constant bit rate / Frame rate	
	H.264 / MPEG-4 *1 — Max. Frame Rate	1 / 3 / 5 / 7.5 / 10 / 15 / 20* / 30* fps * 1.3 Megapixel mode only	
	H.264 / MPEG-4 *1 — Max. Bit Rate/Client	64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 / 8,192* kbps / Unlimited * H.264 mode only	
	H.264 / MPEG-4 *1 — Image Quality	LOW / NORMAL / FINE	
	H.264 / MPEG-4 *1 — Refresh Interval	0.1 fps ~ 30 fps	
	H.264 / MPEG-4 *1 — Transmission Type	UNICAST / MULTICAST	
	JPEG — Image Quality	10 steps	
	JPEG — 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 SDHC/SD memory card is available.)	

TV System		NTSC	PAL
Network	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)	
	SDHC/SD 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	
Alarm	Alarm Source	3 terminal inputs, VMD, Command alarm	
	Alarm Actions	SDHC/SD memory recording, E-mail notification, Alarm terminal output, Indication on browser, FTP image transfer, Panasonic protocol output	
	Alarm Log	With SDHC/SD memory card: 5,000 logs, Without SDHC/SD memory card: 1,000 logs	
	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	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 kΩ	
	Audio Output	ø3.5 mm stereo mini jack (monaural output) Line level	
	External I/O Terminals	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	–10 °C ~ +50 °C (14 °F ~ 122 °F), 90 % or less (without condensation)	
	Dimensions	75 mm (W) x 65 mm (H) x 132.5 mm (D) (2-15/16" (W) x 2-9/16" (H) x 5-3/16" (D))	
	Weight (approx.)	430 g (0.95 lbs.)	

*1 H.264 and MPEG-4 are alternative.

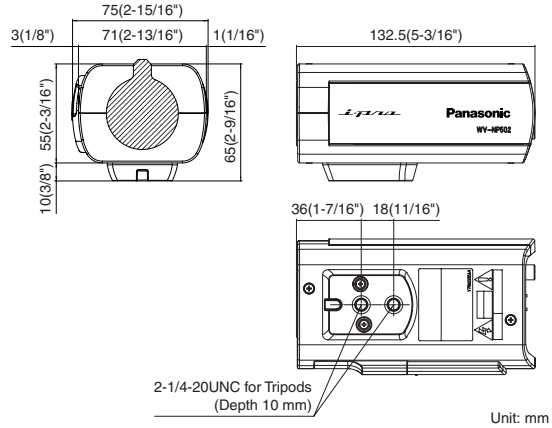
Part Names and Functions

Rear View **Side View** * When the slide cover is opened.



① Slide Cover
② ALC Lens Connector
③ SDHC/SD Memory Card Slot
④ ABF Button
⑤ Clamp for SDHC/SD Memory Card
⑥ Network Connector (RJ-45 Connector)
⑦ Audio Output Connector
⑧ SDHC/SD Memory Card Error LED / ABF LED
⑨ Microphone/Line Input Connector
⑩ INITIAL SET Button
⑪ Power LED
⑫ Monitor for Adjustment Output Connector
⑬ EXT I/O Terminals
⑭ 12 V DC Power Cable Terminals

Appearance



Unit: mm (inches)

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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.
- 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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