



Lens: optional

## Megapixel Network Camera featuring H.264 High Profile and 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 F1.4 (1.3M 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 application
- 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. 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. | • Safety Wire Lug for Wall .....             | 1 pc.  |
| • Installation Guide ..... | 1 pc. | • Screws for Mounting Bracket (M2.5 x 8) ... | 2 pcs. |
| • Code Label*2 .....       | 1 pc. |  |        |

The followings are for installation.

- |                                       |       |
|---------------------------------------|-------|
| • Power Cord Plug .....               | 1 pc. |
| • Safety Wire Plate for Ceiling ..... | 1 pc. |

\*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
<b>Camera</b>		
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	1.3 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 3/100 sec.) ELC: Up to 1/10,000 sec. (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	
<b>Browser GUI</b>		
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 with Pan/Tilt control 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	Listening: ON/OFF with volume, Speaking: ON/OFF with volume	
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 (with SD/SDHC memory)	
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)	
<b>Network</b>		
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 ips MPEG-4: VGA (640 x 480) / QVGA (320 x 240), up to 30 ips JPEG: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 30 ips 3 Megapixel mode: H.264: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 15 ips MPEG-4: VGA (640 x 480) / QVGA (320 x 240), up to 15 ips JPEG: 2,048 x 1,536 / 1,280 x 960 / VGA (640 x 480), up to 15 ips	
H.264 / MPEG-4 *1	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
	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
	Image Quality	LOW / NORMAL / FINE
	Refresh Interval	0.2s/0.33s/0.5s/1s/2s/3s/4s/5s (I 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.)	

### 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.

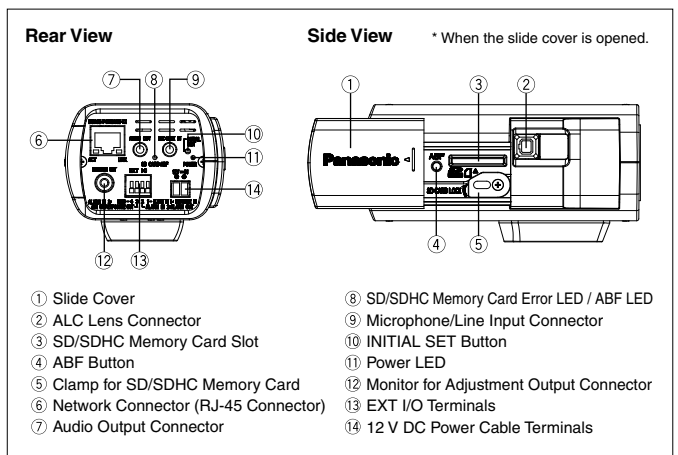
### Important

- 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.

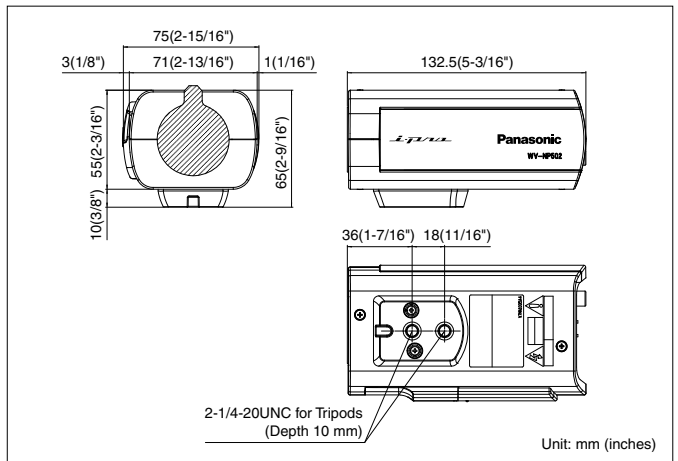
TV System	NTSC	PAL
<b>Network</b>	No. of Simultaneous Users SD/SDHC Memory Card (Option)	Up to 14 users (Depends on network conditions) Manual REC / Alarm REC / Backup upon network failure Compatible SD/SDHC card: Panasonic 64 MB, 128 MB, 256 MB, 512 MB, 1 GB, 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB* model * SDHC card
<b>Alarm</b>	Alarm Source Alarm Actions Alarm/Manual REC/FTP error Log Schedule	3 terminal inputs, VMD, Command alarm SD/SDHC memory recording, E-mail notification, Alarm terminal output, Indication on browser, FTP image transfer, Panasonic protocol output 5,000 logs(with SD/SDHC memory), Alarm log: 1,000 logs(without memory) Alarm / VMD / Access permission
<b>Input / Output</b>	Monitor Output Microphone/Line Input Audio Output External I/O Terminals	1.0 V [P-P] / 75 Ω, NTSC composite, RCA Jack 1.0 V [P-P] / 75 Ω, PAL composite, RCA Jack MIC/Line 6 levels selectable by setup menu. 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 ø3.5 mm stereo mini jack (monaural output) Line level ALARM IN 1 / DAY/NIGHT IN, ALARM IN 2 / ALARM OUT, ALARM IN 3 / AUX OUT / EXPOSURE OUT
<b>General</b>	Safety/EMC Standard Power Source and Power Consumption Ambient Operating Temperature/Humidity Dimensions Weight (approx.)	UL (UL60065), FCC (Part15 ClassA), C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA) CE (EN55022 ClassB, EN55024) 12 V DC: 630 mA, PoE (IEEE 802.3af): 7.6 W -10 C ~ +50 C (14 F ~ 122 F), 90 % or less (without condensation) 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)) 430 g (0.95 lbs.)

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

## Part Names and Functions



## Appearance



- 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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(WV-NP502\_SPEC\_1.pdf)