Panasonic
ideas for life

NTSC **WV-NF302** (12 V DC or PoE)
<Smoke Dome Type>

PAL **WV-NF302** (12 V DC or PoE)
<Clear Dome Type>

Metal Body Day/Night Fixed Dome Network Camera featuring a 1.3 Megapixel CCD for superior image

Key Features

- Superior image of 1,280 x 960 pixels, enhancing its identification capability
- MPEG-4/JPEG digital signal output at VGA image size with up to 30 ips
- MPEG-4 and JPEG dual stream output for simultaneous real time monitoring and high resolution recording
- Progressive output ensures clear images with less motion blur and no tearing even when the subject is moving.
- High sensitivity: 1.5 lux at F1.3 (color, wide) when used with clear dome cover
- ABS (Adaptive Black Stretch) increases visibility of subjects in dark areas without degrading image quality in bright areas by analyzing the "illumination map/signal level distribution" and adjusting gamma correction for each area separately.
- Superior color reproduction by primary (RGB) color filter
- Up to 16x automatic electronic sensitivity enhancement
- Outdoor/Indoor selectable light control modes:
  Electronic shutter and ALC lens iris control are automatically controlled depending on the mode and luminance level.
- 2.8 ~ 10 mm, 3.6x Varifocal lens built-in
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- 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 Terminal input, VMD and Panasonic alarm command can trigger actions such as SD 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.
- Image compression ratio can be changed by alarm so that higher quality image can be provided.
- Focus assist: Focus adjustment position is displayed on the screen making it simple to find the best focus position.
- 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.
- Multiscreen: Image from 16 cameras can be displayed in 4 different Quad screens or 16 split screen (JPEG only). 20 characters camera title is available for each camera.

- FTP client function enables periodic image data transfer or transfer upon alarm.
- SD Memory card slot for manual recording, alarm recording and backup upon network failure.
- 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 best available frame rate.
- Alarm log, Manual REC log, FTP error log saved in the SD 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.
- Multi-language GUI and setup menu: English, French, Italian, Spanish, German, Russian (PAL), English, French (NTSC), (Installation required except for English).
- Scheduling function for Alarm / VMD / Access permission
- IPv4/IPv6 protocol supported
- Analog Monitor output for easier installation
- Flexible power sources: Power over Ethernet (PoE) IEEE 802.3af or 12 V DC
- Three-way hinge (horizontal, vertical and swivel rotation) for flexible installation
- Various mounting options: Surface mount, Embedded mount (with optional WV-Q173), Mounting to a junction box (locally obtained)
- Heavy duty Metal body and polycarbonate dome cover ensure 24/7 operation.

Standard Accessories

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

The followings are for the installation.
- Power cord plug .... 1 pc.
- Audio cable .... 1 pc.
- Camera mount bracket .... 1 pc.

- Camera fixing screw (M3 x 6)
  .... 2 pcs. (incl. a spare screw)
- Cable tie .... 2 pcs. (incl. a spare tie)

* Panasonic IP setting software, the viewer software, the operating instructions (PDF) and the setup instructions (PDF) are included on the CD-ROM.

Optional Accessories

Embedded Ceiling Mount Bracket
WV-Q173

Clear Dome Cover
WV-NF5C
(NTSC only)

Smoke Dome Cover
WV-NF5S
(PAL only)

Specifications

TV System		NTSC	PAL
Camera	Image Sensor	1/3 inch progressive scan CCD	
	Effective Pixels	1,296 (H) x 976 (V)	
	Scanning Mode	Progressive Scan	
	Scanning Area	4.86 mm (H) x 3.65 mm (V)	
	Minimum Illumination	Color: 3.0 lux at F1.3 (Wide, smoke dome)	Color: 1.5 lux at F1.3 (Wide, clear dome)
		B/W: 1.8 lux at F1.3 (Wide, smoke dome)	B/W: 0.9 lux at F1.3 (Wide, clear dome)
		Will be the same as PAL spec	
		with optional clear dome cover	
	White Balance	AWC (2,000 ~ 10,000 K), ATW1 (2,700 ~ 6,000 K), ATW2 (2,000 ~ 6,000 K)	
	Light Control	Outdoor: Automatic integration of ALC and ELC (up to 1/2,000 sec.)	
		Indoor: Automatic integration of ALC and ELC (up to 1/100 sec.)	
	Back Light Compensation	ON (Auto) / OFF (with 8 x 6 mask area)	
	AGC	ON (LOW, MID, HIGH) / OFF	
	Adaptive Black Stretch	ON / 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	OFF / AUTO (No IR filter moving)	
	Digital Zoom	1x, 2x, 4x, Controlled by browser GUI	
	Video Motion Detection	4 areas, Sensitivity: 15 steps, Detection size: 10 steps	
	Privacy Zone	Up to 8 zones, Gray/Mosaic	
	Other Image Controls	R-gain, B-gain, Croma gain, Pedestal, Aperture (Sharpness)	
	Camera Title (OSD)	Up to 16 alphanumeric characters (3 selectable character sizes)	
	Back Focus Adjustment	Manual with Focus Assist	
	Lens Mount	Original	
	Synchronization	Internal	
Lens	Focal Length	2.8 mm ~ 10 mm, 3.6x varifocal	
	Angular Field of View	H : 27.7° (TELE) ~ 100.3° (WIDE) V : 20.8° (TELE) ~ 73.5° (WIDE)	
	Maximum Aperture Ratio	1 : 1.3 (WIDE) 1 : 3.1 (TELE)	
	Focusing Range	1.2 m ~ ∞	
Adjusting Angle	Horizontal	180° (clockwise), 160° (counterclockwise)	
	Vertical	±75°, Image tilt adjustment 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	ON/OFF, Time: 12H/24H, Date: 5 formats on the browser, Summer time (Manual)	
	Alarm Control	Reset	
	One Shot Capture	A still picture is displayed on a newly opened window.	
	Audio	Mic Input: ON/OFF, Audio Output: ON/OFF	
	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 (32 bit) Microsoft® Windows® XP Home Edition SP2 Microsoft® Windows® XP Professional SP2	
	Supported Browser	Windows® Internet Explorer® 7.0 Microsoft® Internet Explorer® 6.0 SP2 (only with Microsoft® Windows® XP Home Edition SP2 or Microsoft® Windows® XP Professional SP2)	
Network	Network IF	10Base-T / 100Base-TX, RJ45 connector, IEEE 802.3af. PoE compatible	
	Image Resolution	1,280 x 960 (JPEG) / VGA (640 x 480) / QVGA (320 x 240)	
	Image Compression	MPEG-4: Image quality: LOW/NORMAL/FINE, Transmission type: UNICAST/MULTICAST JPEG: Image quality: 10 steps, Transmission type: PULL/PUSH MPEG-4 and JPEG dual streaming, JPEG multi-resolution supported.	
	Image Refresh Rate	0.1 / 0.2 / 0.33 / 0.5 / 1 / 2 / 3 / 5 / 6 / 10 / 15 / 30 ips (Frame rate of JPEG will be reduced when displaying JPEG and MPEG-4 simultaneously)	
	Audio Compression	G.726 (ADPCM) 32 kbps / 16 kbps	
	Audio Mode	OFF / Mic input / Audio output / Interactive (Half duplex) / Interactive (full duplex)	
	Total Bit Rate	64 / 128 / 256 / 512 / 1,024 / 2,048 / 4,096 kbps / Unlimited	
	Max Bit Rate/Client (MPEG-4)	Constant bit rate mode: 64 / 128 / 256 / 512 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 kbps Frame rate priority mode: 4,096 kbps / unlimited	
	Supported Protocol	IPv4: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP	
	FTP Client	Alarm image transfer, FTP Periodic transfer, Active/Passive selectable (When the FTP periodic transmission is failed, backup on an optional SD memory card is available.)	
	No. of Simultaneous Users	16 (Depend on network conditions)	
	SD Memory Card (Option)	Manual REC/Alarm REC/Backup upon network failure. Compatible SD card: Panasonic 64 MB, 128 MB, 256 MB, 512 MB, 1 GB, 2 GB model. SDHC card is not supported.	
	Alarm E-mail	Up to 4 e-mail addresses	
	Schedule	Alarm, VMD, Access permission can be enabled/disabled by time schedule	
	User Registration	Up to 20 users	
	User/Host Level	3 Levels: Administrator, Camera control, Live only	
	Security Measures	User authentication (ID 1 ~ 32 digit, PW 4 ~ 32 digit), Host authentication (IP address)	
Alarm	Alarm Source	VMD, Command alarm, Terminal input	
	Alarm Actions	SD memory recording, E-mail notification, Alarm terminal output, Indication on browser, FTP image transfer, Panasonic protocol output	
Input / Output	Monitor Output	1.0 V [p-p] / 75 Ω / NTSC composite signal / RCA jack	1.0 V [p-p] / 75 Ω / PAL composite signal / RCA jack
	Microphone Input	ø3.5 mm mini-jack (applicable microphone: plug-in-power type) Supply voltage: 2.5 V ±0.5 V, Input impedance: 3 kΩ ±10 %	
	Audio Output	ø3.5 mm stereo mini-jack (line-level, monaural output)	
	External I/O Terminals	1x Alarm input, 1x Alarm output, 1x AUX output	

TV System		NTSC	PAL
General	Safety/EMC Standard	UL (UL60065), FCC (Part15 ClassA), C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA)	CE (EN60065, EN55022 ClassB, EN55024), C-Tick
	Power Source / Consumption	12 V DC: 510 mA, PoE (IEEE802.3af): 6.4 W	
	Ambient Operating Temperature	–10 °C ~ +50 °C (14 °F ~ 122 °F)	
	Ambient Operating Humidity	90 % or less (without condensation)	
	Dimensions	ø124 mm x 135 mm (H) (ø4-14/16" x 5-5/16" (H))	
	Weight (approx.)	930 g (2.05 lbs.) (including the camera mount bracket)	

Part Names and Functions

Inside the dome cover

Mounting side

Dome cover

Camera mount bracket
(provided as a standard accessory)

① Monitor Out Connector (for adjustment)(RCA jack)
② Indicators ON/OFF Switch
③ LEDs (Indicators)
④ SD Memory Card Slot
⑤ Focus Assist (F.A.) Button
⑥ Focus Ring
⑦ Zoom Ring
⑧ Tilting Table
⑨ Image Tilt Adjustment Ring
⑩ Panning Table Fixing Screw
⑪ Panning Table
⑫ Upper Cover
⑬ Smoke/Clear Dome
⑭ External I/O Terminals

<Ratings>
AUX Output (AUX)
Alarm Output (ALARM OUT)
GND
AUX
ALARM OUT
ALARM IN
Alarm Input (ALARM IN)

⑮ INITIAL SET Button
⑯ 12 V DC Power Terminal
⑰ Audio Input/Output Terminal
⑱ Network Connector/Access LED, Link LED
⑲ Safety Wire Holder
⑳ Safety Wire

Appearance

4-ø4.7
83.5(3-5/16")
46(1-13/16")
ø124(ø4-14/16")
0.3
89(3-1/2")
135(5-5/16")
SR41.5

Unit: mm (inches)

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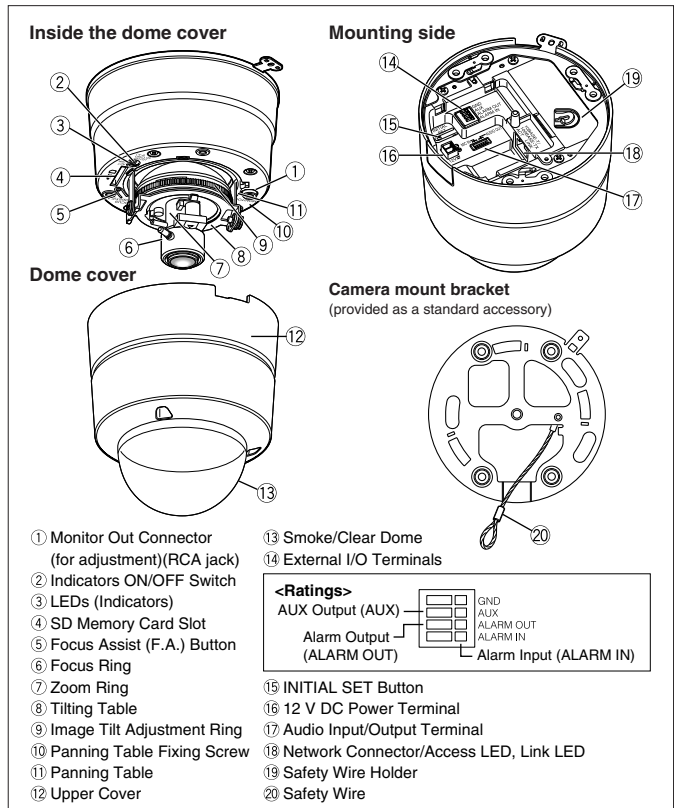**Important**
– Safety Precaution: carefully read the operating instructions and installation manual before using this product.
– Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.
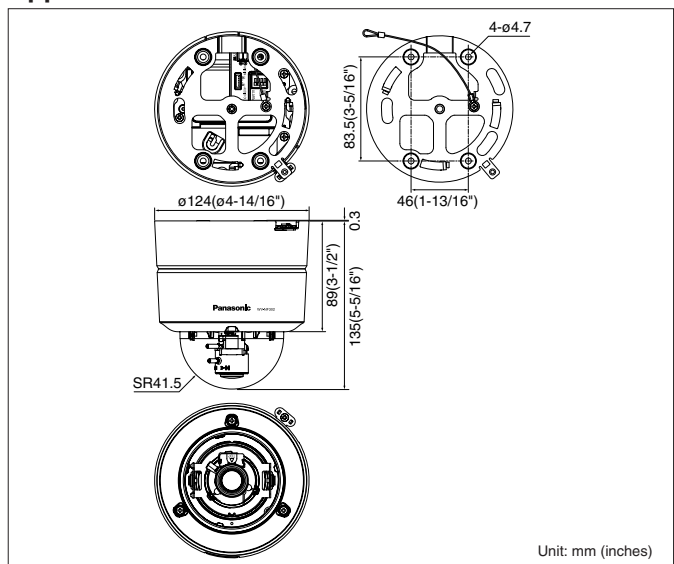
• All TV pictures are simulated.
• Weights and dimensions are approximate.
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