



### 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 (Color) with clear dome cover at F1.3 (Wide)
- ABS (Adaptive Black Stretch) enhances visibility of dark area without degrading image quality in bright area by analyzing the "illumination map/signal level distribution" and adjusting gamma correction for each area separately.
- Superior color reproduction by primary (RGB) color filter
- Electronic sensitivity enhancement: Auto (Up to 16x) / OFF
- 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 Auto Iris lens
- 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 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.
- Internet mode: 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
- 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.	• Camera fixing screw (M3 x 6) .....	2 pcs. (incl. a spare screw)
• Installation Guide .....	1 pc.	• Cable tie .....	2 pcs. (incl. a spare tie)
• Code Label .....	1 pc.	* Panasonic IP setting software, the viewer software, the operating instructions (PDF) and the setup instructions (PDF) are included on the CD-ROM.	
The followings are for the installation.			
• Power cord plug .....	1 pc.	• Focus adjustment jig .....	1 pc.
• Audio cable .....	1 pc.		
• Camera mount bracket .....	1 pc.		

#### Optional Accessories

<p>Embedded Ceiling Mount Bracket WV-Q173</p> 	<p>Smoke Dome Cover WV-NF5S</p> 
--	---

## Specifications

TV System	NTSC	PAL
<b>Camera</b>	Image Sensor	
	6 mm (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: 1.5 lux at F1.3 (Wide, clear dome) B/W: 0.9 lux at F1.3 (Wide, clear dome)	
	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 3/100 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, Chroma 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		
<b>Lens</b>	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 ~ ∞		
<b>Adjusting Angle</b>	Horizontal	
	180° (clockwise), 160° (counterclockwise)	
Vertical		
±75°, Image tilt adjustment range: ±100°		
<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 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) 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)		
<b>Network</b>	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, 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, 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)		
<b>Alarm</b>	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		
<b>Input / Output</b>	Monitor Output (for adjustment)	
	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		

### Trademarks and registered trademarks

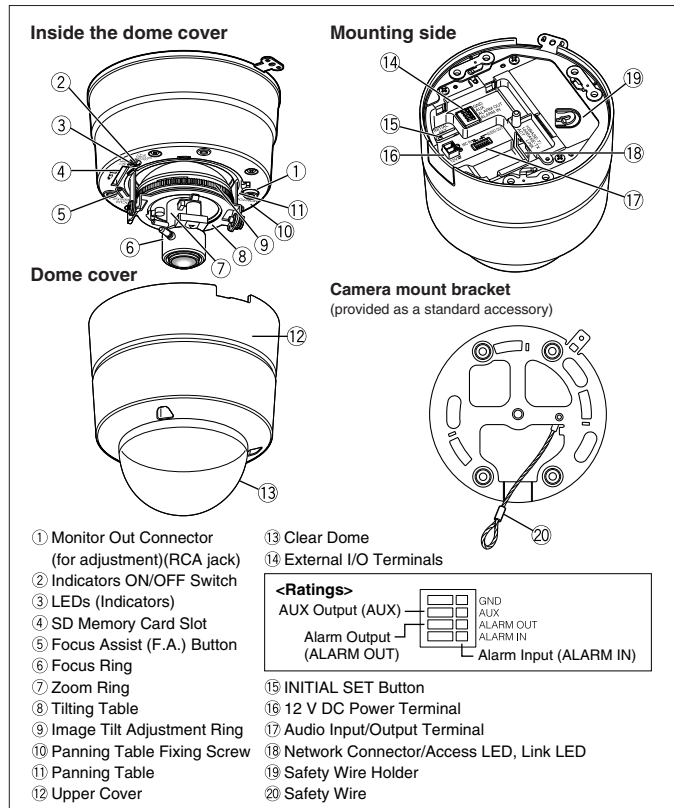
– Microsoft, and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.  
– "Super Dynamic", "SDII", "SDIII" and "i-Pro" logos are trademarks or registered trademarks of Panasonic Corporation.

### Important

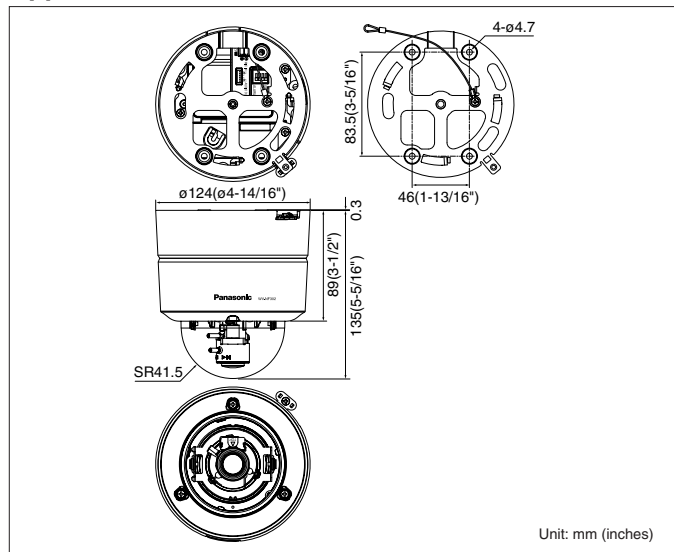
– Safety Precaution: carefully read the operating instructions and installation manual before using this product.  
– Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.

TV System	NTSC	PAL
<b>General</b>	Safety/EMC Standard	
	UL (UL60065), FCC (Part15 ClassA), CE (EN55022 ClassB, EN55024), C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA)	
	Power Source / Consumption	
	12 V DC: 510 mA, PoE (IEEE802.3af): 6.4 W (Class 2 device)	
	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



## 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.

DISTRIBUTED BY:

**Panasonic**

<http://panasonic.net/security/>

Printed in Japan (2A-034DL)