

Preliminary



## Weather Resistant Dome Network Camera featuring 30x zoom and *Super Dynamic III*

### Key Features

- *Super Dynamic III* technology delivers 128x wider dynamic range compared to conventional cameras.
- High sensitivity with Day-Night function: 0.5 lux (Color) at F1.4 (WIDE), 0.04 lux (B/W) at F1.4 (WIDE). IR cut filter switches on and off to ensure optimal picture quality in both color and B/W.
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise in various conditions.
- Electronic sensitivity enhancement: Auto (Up to 32x) / OFF.
- 30x zoom lens: 3.8 mm ~ 114 mm (approx. 300x with digital zoom).
- Panning speed of max. 400°/s at preset mode and 0.065°/s super fine control at manual mode.
- 5 degrees upper view for various applications
- Auto tracking: The camera follows the largest movement in the image automatically. The camera will pan and tilt to keep the subject in the center of the image.
- Video Motion Detector with 4 programmable detection areas and 6 sensitivity levels.
- Various I/O terminals: ALARM IN 1 / BW IN, ALARM IN 2 / ALARM OUT, ALARM IN 3 / AUX OUT.
- Alarm sources include Terminal 1 ~ 3, VMD and Panasonic alarm command. Alarm actions include Preset positions 1 ~ 256, PATROL 1 ~ 4, AUTO TRACK 1 ~ 4, SEQ, SORT, AUTO PAN, B/W, SD memory recording, FTP image transfer, E-mail notification, Indication on browser, Terminal output, Panasonic protocol output and Auto track.
- Auto image stabilizer for applications where vibration or wind is a concern.
- 16 alphanumeric camera title display (OSD and on the browser).
- Built-in MPEG-4/JPEG digital signal output at VGA image size with up to 30 ips.
- MPEG-4 and JPEG dual stream output for simultaneous live monitoring and high resolution recording.
- Progressive Output with motion adaptive interlace/progressive conversion allows every frame to be clear even when the object is moving.
- PTZ control can be taken on the user friendly GUI with 16 speeds pan/tilt and new "Drag and Zoom" operation enabling finer control. 256 speeds available for system with WV-CU950 system controller.
- 360° map shot: 8 thumbnail images at 45° intervals make it simple to direct the camera easily by clicking on a thumbnail.
- Built-in network interface (10Base-T / 100Base-TX).
- Multiscreen: Image from 16 cameras can be displayed in 4 different Quad screens or 16-screen (JPEG only).

- FTP client function enables periodic image data transfer or transfer upon alarm.
- Alarm notification via e-mail.
- Max bit rate/client (64 / 128 / 256 / 512 / 1,024 / 2,048 / 4,096 kbps) or frame rate priority mode (4,096 kbps / Unlimited) for MPEG-4 and Total bit rate control (64 / 128 / 256 / 512 / 1,024 / 2,048 / 4,096 kbps / 10 Mbps / Unlimited) allowing flexible network management.
- Full duplex 2-way audio feature (G.726, 32/16 kbps).
- Alarm log, Manual REC log, FTP error log saved in the SD 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, Polish, Russian (PAL), English, French (NTSC), (Installation required except for English).
- SD Memory card slot for Manual recording, Alarm recording and Backup upon network failure.
- Scheduling function for Alarm / VMD / Access permission, Preset position call and Position refresh.
- IP66 rated water and dust resistant. IEC60529 measuring standard compatible.
- Built-in fan/heater for temperature changes of -40 °C ~ +50 °C (-40 °F ~ +122 °F).
- Built-in sun shield permits camera locations in direct sunlight.

### Standard Accessories

- |                                   |       |   |       |
|-----------------------------------|-------|---|-------|
| • Operating Instructions .....    | 1 pc. | • 8P Alarm Cable .....                            | 1 pc. |
| • Warranty Card (NTSC only) ..... | 1 pc. | • Connector for 24 V AC (only for WV-NW964) ..... | 1 pc. |
| • CD-ROM .....                    | 1 pc. | • Front/rear sun shield .....                     | 1 set |
- The IP setup software, the viewer software and the network operating instructions (PDF) are included on the CD-ROM.
- |   |                                |
|---|--------------------------------|
| • Front/rear sun shield mounting screws ..... | 2 pcs. (*one screw is a spare) |
| • Waterproof cap .....                        | 3 pcs.                         |
| • RJ-45 junction connector .....              | 1 pc.                          |
- The following items are for installation.

### Optional Accessory

Wall Mount Bracket  
WV-Q122



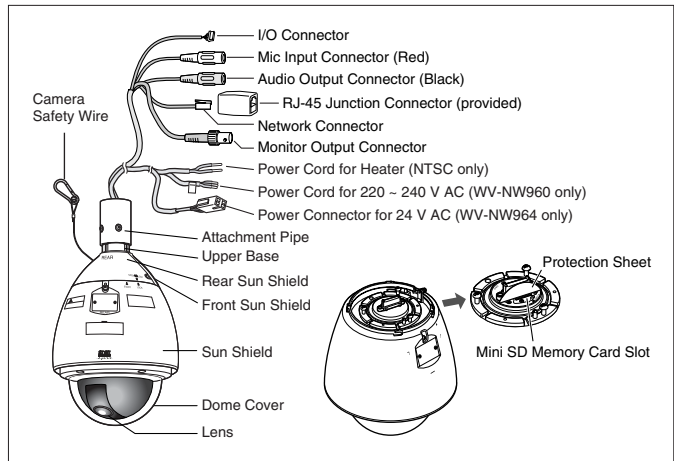
This catalog is provided for all over the world.  
Some accessories may not be available in some countries.

## Specifications

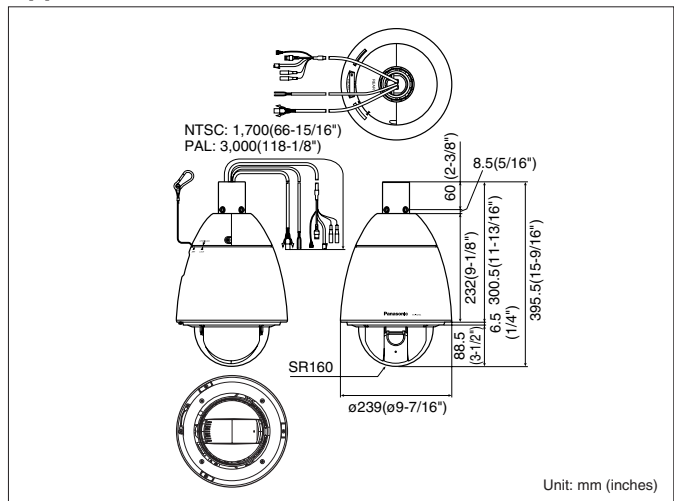
TV System	NTSC	PAL
<b>Camera</b>	1/4-type interline transfer CCD	
Effective Pixels	768 (H) x 494 (V)	
Scanning Mode	2 : 1 interlace scan (with motion adaptive interlace/progressive conversion)	
Scanning Area	3.65 (H) x 2.74 (V) mm	
Minimum Illumination	Color (30IRE): 0.5 lux (Sens up: OFF), 0.02 lux (Sens up: 32x) at F1.4 B/W (10IRE): 0.04 lux (Sens up: OFF), 0.0013 lux (Sens up: 32x) at F1.4	
White Balance	AWC (2,000 - 10,000 K), ATW1 (2,700 - 6,000 K), ATW2 (2,000 - 6,000 K)	
Light Control	Automatic integration of ALC/ELC	
AGC	ON (LOW, MID, HIGH) / OFF	
Super Dynamic III	ON / OFF (With BLC masking 8 x 6 areas)	
Dynamic Range	52 dB typical (Super Dynamic III: ON, Shutter speed: OFF)	
Electronic Shutter	OFF (1/60), AUTO, 1/100	
Electronic Sensitivity UP	OFF / AUTO (2x / 4x / 6x / 10x / 16x / 32x)	
Digital Noise Reduction	High/Low, 2D/3D adaptive DNR	
Black and White Mode	ON / OFF / Auto (high / Low) (IR moving)	
Digital Zoom	Up to 10x	
Video Motion Detection	For preset position: 4 programmable detection areas, Sensitivity: 6 steps Non-preset position: Detects entire screen except clock area, Sensitivity: 6 steps	
Privacy Zone	Up to 8 zones, Gray / Mosaic	
Auto Image Stabilizer	ON / OFF	
Camera Title (OSD)	Up to 16 characters (alphanumeric characters, marks)	
Auto Focus	AUTO	
Other Adjustment	White balance adjustment, Chroma gain, Aperture, Pedestal	
Focal Length	3.8 mm - 114 mm, 30x Zoom, 300x with 10x digital zoom	
Zoom Speed	manual: approx. 6 sec. (WIDE - TELE) preset: approx. 2 sec. (WIDE - TELE)	
Angular Field of View	H: 1.9° (TELE) ~ 52.0° (WIDE), V: 1.4° (TELE) ~ 40.0° (WIDE)	
Maximum Aperture Ratio	1 : 1.4 (WIDE) ~ 3.7 (TELE)	
Focusing Range	1.5 m ~ ∞	
Aperture Range	F1.4 ~ 22, Close	
Panning Range	360° endless	
Panning Speed	Manual: Approx. 0.065°/s ~ 120°/s, Up to 256 steps (depending on the controller) Preset: up to approx. 400°/s	
Tilting Range	-5° ~ 185° (upward-level-downward) Tilting angle limit: 0° / -1° / -2° / -3° / -4° / -5°	
Tilting Speed	Manual: Approx. 0.065°/s ~ 120°/s, Up to 256 steps (depending on the controller) Preset: up to approx. 400°/s	
Proportional Pan/Tilt Control	Yes	
Number of Preset Positions	256	
Auto Mode	OFF / preset sequence / auto pan / auto track / patrol	
Auto Track	Standard Auto track	
Patrol	1 / 2 / 3 / 4	
Image Hold	ON / OFF	
Digital Flip	Yes	
PTZ Position Display	ON / OFF	
Preset Position Setting	Preset ID / Auto focus / Dwell time / SDIII / ALC mask area	
Map Shot	360° map shot / preset map shot	
<b>Browser GUI</b>	Camera Control	
	Pan/Tilt (16 steps), Zoom, Focus, Click centering, Drag zoom, Iris, Preset position call and program, Auto mode.	
	Display Mode	
	Image from 16 cameras can be displayed in 4 different Quad screens or 16-screen (JPEG only).	
	Camera Title	
	Up to 16 alphanumeric characters	
	SD Memory Data Download	
	Images recorded in the SD memory card can be downloaded.	
	Clock Display	
	Time: 12H / 24H, Date: 5 formats on the browser, Summer time (Manual)	
	Alarm Control	
	Reset	
	English, French	English, French, Italian, Spanish, German, Polish, Russian (Installation required except for English.)
	GUI / Setup Menu Language (Installation required for French)	
	System Log	
	Alarm log, Manual REC log, FTP error log (SD memory required)	
	Supported OS	
	Microsoft® Windows® 2000 Professional SP4 (Only with Internet Explorer 6.0 SP1) Microsoft® Windows® XP Professional/Home SP2 Microsoft® Windows Vista	
	Supported Browser	
	Microsoft® Internet Explorer® 7.0 Microsoft® Internet Explorer® 6.0 SP2 Microsoft® Internet Explorer® 6.0 SP1 (Only with Windows 2000 Professional SP4)	
<b>Network</b>	Network IF	
	10Base-T / 100Base-TX, RJ-45 connector	
	Image Resolution	
	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 and JPEG multi-resolution supported.	
	Image Refresh Rate	
	0.1 / 0.2 / 0.33 / 0.5 / 1 / 2 / 3 / 5 / 6 / 10 / 15 / 30 ips (Max rate will be 5 ips-VGA, 10 ips-QVGA when transmitting JPEG and MPEG-4 simultaneously)	
	Audio Compression	
	G.726 (ADPCM) 32 kbps / 16 kbps	
	Audio Mode	
	OFF / Mic input / Audio output / Interactive / full duplex	
	Authentication for Audio	
	Level 1 only / Level 2 higher / All users	
	Total Bit Rate	
	64 / 128 / 256 / 512 / 1,024 / 2,048 / 4,096 kbps / 10 Mbps / Unlimited	
	Max Bit Rate / Client (MPEG-4)	
	64 / 128 / 256 / 512 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 kbps or Frame rate priority (4,096 kbps / unlimited)	
	Supported Protocol	
	TCP/IP, UDP/IP, HTTP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, RTP	
	FTP Client	
	Alarm image transfer, Periodic image transfer	
	No. of Simultaneous Users	
	Up to 8 users	
	Mini SD Memory Card (Option)	
	Manual REC / Alarm REC / Backup upon network failure. Compatible SD card: Panasonic mini SD card: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB, 2 GB model. SDHC standard card not supported.	
	Alarm E-mail	
	Yes, Port number assignable.	
	User Registration	
	Up to 16 users	
	User/Host Level	
	3 Levels: Administrator, Camera control, Live only	
	Security Measures	
	User authentication (ID 32 digit, PW 32 digit), Host authentication (IP address)	

TV System	NTSC	PAL
<b>Alarm</b>	3x Terminal inputs, VMD, Command alarm	
Alarm Source	Preset position 1 ~ 256, PATROL 1 ~ 4, AUTO TRACK 1 ~ 4, SEQ, SORT, AUTO PAN, B/W, SD memory recording, FTP image transfer, e-mail notification, Indication on browser, Terminal output, Panasonic protocol output, Auto track	
Alarm Actions	With SD memory card: 5,000 logs, Without SD memory card: 1,000 logs	
Alarm Log	Alarm / VMD / Access permission, Preset position call, Position refresh	
Schedule		
<b>Input / Output</b>	Monitor Output	
	1.0 V [P-P] / 75 Ω, NTSC composite, BNC	1.0 V [P-P] / 75 Ω, PAL composite, BNC
Microphone Input	MIC IN (Applicable microphone; Plug-in power type) Supply voltage: 2.5 V ± 0.5 V Input impedance: 3 KΩ ± 10%	
Audio Output	AUDIO OUT ø3.5 mm stereo mini jack (monaural output) Line level	
External I/O Terminals	ALARM IN 1 / BW IN, ALARM IN 2 / ALARM OUT, ALARM IN 3 / AUX OUT	
<b>General</b>	Safety / EMC Standard	
	UL (6500 Edition 2), FCC (Part15 ClassA), C-UL (E60065), DOC (ICES003 ClassA)	CE (EN60065, EN55022, EN55024, ClassB), GOST (R 51558).
Power Source and Power Consumption	24 V AC 60 Hz, Approx. 85 W (Heater ON)	WV-NW960: 220 ~ 240 V AC 50 Hz, Approx. 85 W (Heater ON) WV-NW964: 24 V AC 50 Hz, Approx. 85 W (Heater ON)
Ambient Operating Temperature/Humidity	-40 °C ~ +50 °C (-40 °F ~ 122 °F) (Heater ON), 90 % or less (without condensation)	
Water and Dust Resistance	IP66, IEC60529 measuring standard compatible.	
Dimensions	ø239 mm x 395.5 mm (H) (ø9-7/16" x 15-9/16" (H))	
Weight (approx.)	Camera: Approx. 4.3 kg (9.46 lbs.) Accessories (Camera mounting bracket, decorative cover): Approx. 200 g (0.44 lbs.)	

## Part Names and Functions



## Appearance



### Trademarks and registered trademarks

– Microsoft, and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.

### 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/menu are simulated.
- Weights and dimensions are approximate.
- Specifications are subject to change without notice.
- These products may be subject to export control regulations.
- Product pictures shown in this catalog are all NTSC models.

DISTRIBUTED BY:

**Panasonic**  
Panasonic is the brandname of Matsushita Electric.  
Printed in Japan  
(2A-017L)