

**NTSC** WV-NW484S (24 V AC, 12 V DC or PoE) <Smoke Dome Type> **PAL** WV-NW484S (24 V AC, 12 V DC or PoE) <Clear Dome Type>



## Network camera designed for heavy duty use featuring *Super Dynamic III*

### Key Features

- 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 provides clear images even when the subject is moving.
- **Super Dynamic III** technology delivers 128x wider dynamic range compared to conventional cameras.
- High sensitivity with Day/Night function: 0.6 lux (Color), 0.08 lux (B/W) with clear dome cover at F1.4 (Wide). IR cut filter switches on/off to enhance the sensitivity in B/W mode.
- Adaptive Digital Noise Reduction: Integration of 2D-DNR and 3D-DNR ensures noise reduction in various conditions.
- Electronic sensitivity enhancement: Auto (Up to 32x) / OFF
- Electronic shutter for anti flicker
- 3.8 ~ 8.0 mm, 2x Varifocal Auto Iris lens
- ABF (Auto Back Focus) ensures easy installation and stable focus in both color and B/W modes.
- Scene Change Detection alarms when lens is covered, spray painted, removed or defocused.
- VMD (Video Motion Detector) with 4 programmable detection areas and 6 sensitivity levels
- Meta data for VMD is supplied to work with the WJ-ND400 playback VMD function.
- Auto Image Stabilizer for applications where vibration or wind is a concern.
- Flexible digital zoom and pan/tilt operation: Up to 3x variable digital zoom and pan/tilt can be set in the setup menu (effective both for analog and network video). 2x or 4x digital zoom and pan/tilt can be controlled by the browser GUI for network video.
- Camera title displays: Up to 16 (OSD) and 20 (on browser) alphanumeric characters
- SD Memory card slot for alarm recording and backup upon network failure
- Alarm sources include Terminal input, VMD and Panasonic alarm command, and can trigger actions including SD memory recording/ FTP image transfer, E-mail notification, Alarm indication, Terminal output and Panasonic protocol output.
- Built-in network interface (10Base-T / 100Base-TX)
- Power over Ethernet (PoE) IEEE 802.3af.
- Multiscreen: Images from 8 cameras can be displayed in 2 separate Quad screens (JPEG only). 20 characters camera title is available for each camera.

- FTP client function enables periodic image data transfer or transfer upon alarm.
- Alarm e-mail notification
- Max. bit rate/client (64 / 128 / 256 / 512 / 1,024 / 1,536 / 2,048 / 3,072 / 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 / Unlimited) allowing flexible network management.
- Supported Protocol: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP
- 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
- IP66 rated water and dust resistant. Compatible with IEC60529 measurement standard.
- Dehumidification device for use in various weather conditions
- Vandal resistant mechanism for high reliability
- 3-way hinge (horizontal, vertical and swivel rotation) for easy installation
- Optional heater maintains operating temperature  $-30^{\circ}\text{C} \sim +50^{\circ}\text{C}$  ( $-22^{\circ}\text{F} \sim 122^{\circ}\text{F}$ ) when operated by 24 V AC or PoE.

### Standard Accessories

• CD-ROM* .....	1 pc.	• Mounting Bracket .....	1 pc.
• Operating Instructions, Basic Manual ...	1 pc.	• Driver Bit .....	1 pc.
• Label (MAC address) .....	1 pc.	• Waterproof tape (butyl rubber tape) ...	1 pc.
The followings are for installation.			
• 4-pin Alarm Cable .....	1 pc.	* The CD-ROM contains Panasonic IP Setup Software, viewer software "Network Camera View3", and Standard Operation Manual/ Standard Setup Manual (PDF)	
• RJ-45 female-female conversion connector .....	1 pc.		

### Optional Accessories

<p>Heater Unit <b>WV-CW4H</b></p> 	<p>Embedded Ceiling Mount Bracket <b>WV-Q169</b></p> 	<p>Clear Dome Cover <b>WV-CW4C</b> (NTSC only)</p> 
		<p>Smoke Dome Cover <b>WV-CW4S</b> (PAL only)</p> 

# Specifications

TV System	NTSC	PAL
<b>Camera</b>	6 mm (1/3 inch) interline transfer CCD	
Effective Pixels	768 (H) x 494 (V)	
Scanning Mode	2:1 interlace scan (with motion adaptive interlace/progressive conversion)	
Scanning Area	4.8 (H) x 3.6 (V) mm	
Minimum Illumination	Color (30IRE): 1.5 lux (Sens up: OFF), 0.046 lux (Sens up: 32x) at F1.4 B/W (10IRE): 0.16 lux (Sens up: OFF), 0.005 lux (Sens up: 32x) at F1.4 Will be same as PAL spec with WV-CW4C optional clear dome cover	Color (30IRE): 0.6 lux (Sens up: OFF), 0.019 lux (Sens up: 32x) at F1.4 B/W (10IRE): 0.08 lux (Sens up: OFF), 0.003 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	ALC	
AGC	ON (LOW) / ON (MID) / ON (HIGH) / OFF	
Super Dynamic III	ON or 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 (OFF, 1/100), 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	Mode: AUTO1 / AUTO2 / ON / OFF, Level: High / Low, Wait time: 10 sec - 5 min, with external control	
Digital Zoom	Up to 4x variable with digital pan/tilt. Set by setup menu. (when this zoom is used, image on the browser is also zoomed)	
Video Motion Detector	Motion detection mode: 4 areas, 6 sensitivity levels / Scene change detection mode: 6 sensitivity levels, Auto suspend 5 sec.	
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	
Back Focus Adjustment	ABF / MANUAL, ABF mode upon CL/BW switching: AUTO / PRESET / FIX	
Lens Mount	CS-mount	
Synchronization	Internal	
<b>Lens</b>	Focal Length 3.8 – 8.0 mm, 2x varifocal	
Angular Field of View	H: 35.6° (Tele) – 73.6° (Wide) V: 26.6° (Tele) – 53.4° (Wide)	
Maximum Aperture Ratio	1:1.4 (Wide) 1:1.8 (Tele)	
Focusing Range	1.2 m (3.9 ft.) – ∞	
<b>Pan and Tilt</b>	Panning Range ±175° Tilting Range ±75°	
<b>Browser GUI</b>	Camera Control Pan / Tilt / Zoom (by digital zoom), Brightness, AUX ON/OFF	
Display Mode	Image from 8 cameras can be displayed in 2 different Quad screens (JPEG only). 20 characters camera title available.	
Digital Zoom	2x, 4x, By browser	
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 is displayed on a newly opened window.	
GUI / Setup Menu	English, French	English, French, Italian, Spanish, German, Russian
Language	(Installation required for French)	(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/Professional SP2, Microsoft® Windows® 2000 Professional SP4 The language of the OS must be same as selected GUI language.	
Supported Browser	Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business 32 bit), Microsoft® Internet Explorer® 6.0 SP2 (Microsoft® Windows® XP Home/Professional SP2), Microsoft® Internet Explorer® 6.0 SP1 (Microsoft® Windows® 2000 Professional SP4)	
<b>Network</b>	Network IF 10Base-T / 100Base-TX, RJ45 connector IEEE 802.3af. PoE compatible	
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, 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)	
Total Bit Rate	64 / 128 / 256 / 512 / 1,024 / 2,048 / 4,096 kbps / 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, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP	
FTP Client	Alarm image transfer, Periodic image transfer	
No. of Simultaneous Users	8 (Depends on network conditions)	
SD Memory Card (Option)	Alarm REC/Backup upon network failure. Compatible SD card: Panasonic 64 MB, 128 MB, 256 MB, 512 MB, 1 GB, 2 GB model	
Alarm E-mail	Up to 4 e-mail addresses	
User Registration	Up to 16 users	
User/Host Level	3 Levels: Administrator, Camera control, Live only	
Security Method	User authentication (ID and Password), Host authentication (IP address)	
<b>Alarm</b>	Alarm Source VMD, Command alarm, Terminal input	
Alarm Actions	SD memory recording/FTP image transfer, e-mail notification, Terminal output, Indication on browser, Panasonic protocol output	
<b>Input / Output</b>	Monitor Output (for adjustment) 1.0 V (P-P) / 75 Ω, NTSC composite, RCA jack   1.0 V (P-P) / 75 Ω PAL composite, RCA jack	
External I/O Terminals	ALARM input, ALARM output/Black and White Mode input, AUX output	

\* With optional Heater Unit WV-CW4H \*\* Optional Heater Unit WV-CW4H cannot be used under 12 V DC operation

### Trademarks and registered trademarks

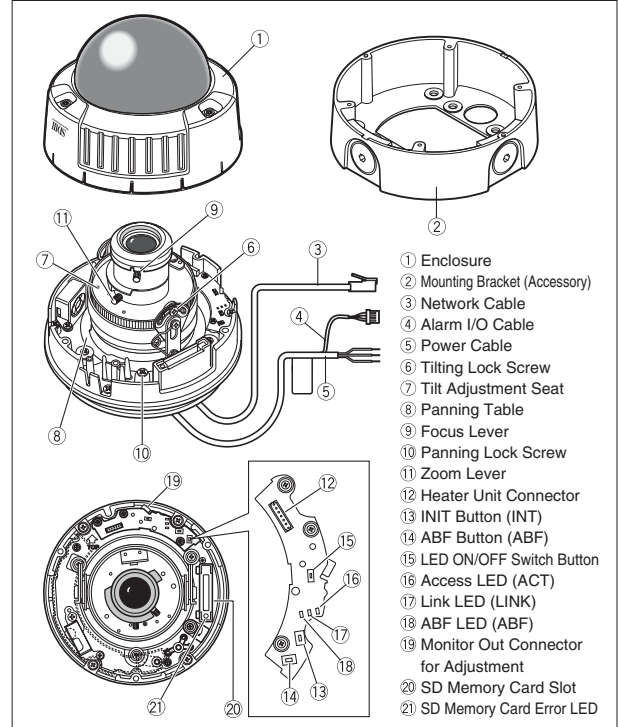
– Microsoft, and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.  
– “Super Dynamic”, “SDII”, “SDIII” and “i-Pro” logos are trademarks or registered trademarks of Panasonic Corporation.

### Important

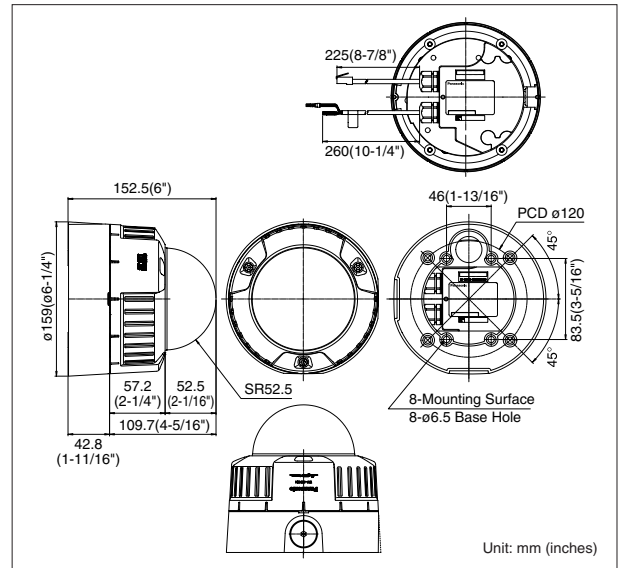
– Safety Precaution: carefully read the operating instructions and installation manual before using this product.  
– Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.

TV System	NTSC	PAL
<b>General</b>	UL (6500), FCC (Part15 ClassA), C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA)	CE (EN55022 ClassB, EN55024), GOST (GOST R 51558)
Power Source / Consumption	24 V AC, 60 Hz 8.2 W 16 W* / 12 V DC 920 mA** / PoE (IEEE802.3af) 9.2 W, 12 W* (Class 0 device)	
Ambient Operating Temperature	–10 °C ~ +50 °C (14 °F ~ 122 °F), –30 °C ~ +50 °C (–22 °F ~ 122 °F) with Optional Heater (24 V AC / PoE)	
Ambient Operating Humidity	90 % or less (without condensation)	
Water and Dust Resistance	IP66, IEC60529 measuring standard compatible.	
Dimensions	ø159 mm x 153 mm (H) (ø6-1/4" x 6-1/32")	
Weight	approx. 1.9 kg (4.18 lbs.) (with Mounting 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.

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Printed in Japan (2A-004DL)