



### HD/1,280 x 960 H.264 Fixed Dome Network Camera

#### Key Features

- 720p HD images up to 30 fps
- Newly developed 1.3 Megapixel high sensitivity MOS Sensor
- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording by “UniPhier<sup>®</sup>”, Panasonic’s proprietary System LSI platform.
- Full frame (Up to 30 fps) transmission at 1,280 x 960 image size
- Wide Dynamic Range and ABS (Adaptive Black Stretch) technologies deliver wider dynamic range compared with conventional cameras.
- Face Wide Dynamic Range technology ensures clear face image.
- H.264 and MPEG-4 are selectable for system migration.
- High sensitivity with Simple Day/Night function: 0.3 lx (Color), 0.2 lx (B/W) at F1.3 (Wide)
- Focus Assist ensures easy installation.
- Digital Noise Reduction: 3D-DNR ensures noise reduction in various conditions.
- Progressive scan 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 / Fixed electronic shutter  
Outdoor / Indoor: Electronic shutter and ALC lens iris control are automatically controlled depending on the mode and luminance level. Fixed electronic shutter: Up to 1/10,000 fixed electronic shutter can be selectable.
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection function detects the position of human face and the information is sent by XML or video stream.
- Meta data for VMD is supplied to work with the WJ-ND400 playback VMD function.
- Privacy Zone can mask up to 2 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 embedded in the image
- Alarm sources including 1 terminal input, VMD and Panasonic alarm command can trigger actions such as SDHC/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.
- JPEG image compression ratio can be changed by alarm so that higher quality image can be provided.
- 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.
- SDHC/SD Memory card slot for manual recording (H.264 / JPEG), alarm recording (H.264 / JPEG) and backup upon network failure (JPEG)
- H.264/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 specified frame rate.
- Alarm log, Manual REC log, FTP error log saved in the SDHC/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: 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
- 2.8 mm ~ 10 mm, 3.6x Varifocal Auto Iris lens

#### Standard Accessories

• CD-ROM*1 .....	1 pc.	• Installation Template Label .....	1 pc.
• Installation Guide .....	1 pc.	• Cable Tie .....	2 pcs. (incl. 1 spare)
• Code Label*2 .....	1 pc.		

The followings are for installation.

• Power Cord Plug .....	1 pc.
• External I/O Terminal Plug.....	1 pc.

\*1 The CD-ROM contains the operating instructions (PDFs) and different kinds of tool software programs.  
\*2 This label may be required for network management. The network administrator shall retain the code label.

#### Optional Accessories

Embedded Ceiling Mount Bracket (AV-light gray) <b>WV-Q168</b>		Embedded Ceiling Mount Bracket (Sail white) <b>WV-Q174</b> Launches in September/2010	
Smoke Dome Cover <b>WV-CF55</b>		Ceiling Mount Bracket (PAL only) <b>WV-Q105</b>	

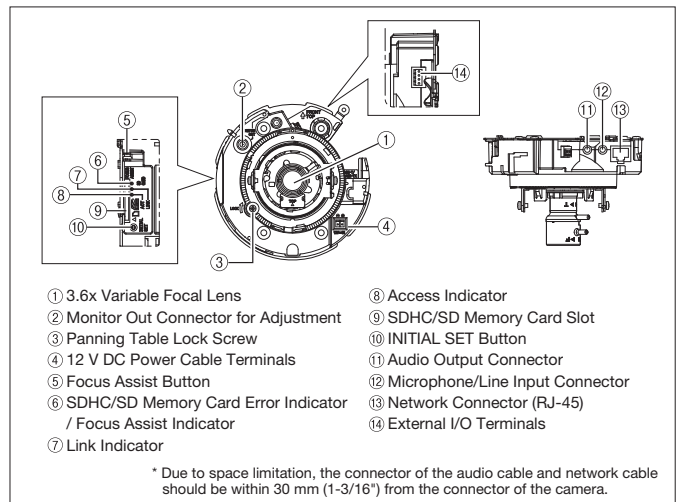
## Specifications

TV System	NTSC	PAL
<b>Camera</b>	1/3 type MOS Sensor Effective Pixels Approx. 1.3 megapixel Scanning Mode Progressive scan Scanning Area 4.8 mm (H) x 3.6 mm (V) Minimum Illumination Color: 0.3 lx, B/W: 0.2 lx at F1.3 (Shutter: 1/30 s, AGC: High), Color: 0.019 lx, B/W: 0.013 lx at F1.3 (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 [50 Hz]: Automatic integration of ALC and ELC (up to 1/100 s) Indoor [60 Hz]: Automatic integration of ALC and ELC (up to 1/120 s) Shutter Speed Fix shutter: OFF (1/30), 3/100, 3/120, 2/100, 2/120, 1/100, 1/120, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000 Wide Dynamic Range ON / OFF Face Wide Dynamic Range ON / OFF (Only at Wide Dynamic Range: ON) Adaptive Black Stretch ON / OFF (Only at Wide Dynamic Range: OFF) AGC ON (LOW, MID, HIGH) / OFF Electronic Sensitivity UP AUTO / AUTO (Max. 2x (2/30 s), 4x (4/30 s), 6x (6/30 s), 10x (10/30 s), 16x (16/30 s)) Simple Day/Night Mode AUTO / OFF Digital Noise Reduction High / Low Video Motion Detection 4 areas, Sensitivity: 15 steps, Detection size: 10 steps Privacy Zone Up to 2 zones, Gray Camera Title (OSD) Up to 16 alphanumeric characters Focus Adjustment Focus Assist	
<b>Lens</b>	Vari 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 0.3 m ~ ∞	
<b>Adjusting Angle</b>	Horizontal: 180° (clockwise), 170° (counter clockwise) Vertical: ±75°, Imaging tilt adjustment range: ±100°	
<b>Browser GUI</b>	Camera Control Brightness, AUX ON / OFF 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 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 Mic (Line) Input: ON / OFF Volume adjustment: Low / Middle / High Audio Output: ON / OFF Volume adjustment: Low / Middle / High SD Memory Data Download Still or motion Images recorded in the SDHC/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 (SDHC/SD memory when the recording format is set to JPEG.) error logs Supported OS Microsoft® Windows® 7 Professional 64 bit/32 bit, Microsoft® Windows Vista® Business SP1 32 bit, Microsoft® Windows® XP Professional SP3 The language of the OS must be same as selected GUI language. Supported Browser Windows® Internet Explorer® 8.0 32 bit (Microsoft® Windows® 7 64 bit/32 bit), Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business SP1 32 bit), Microsoft® Internet Explorer® 6.0 SP3 (Microsoft® Windows® XP Professional SP3)	
<b>Network</b>	Network IF 10Base-T / 100Base-TX, RJ-45 connector Image Resolution [4 : 3] H.264: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps MPEG-4: VGA (640 x 480) / QVGA (320 x 240), up to 30 fps JPEG: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps Aspect ratio: [16 : 9] H.264: 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps JPEG: 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps H.264/ MPEG-4 Transmission Mode Constant bitrate / Framerate priority Frame Rate 1 / 3 / 5 / 7.5 / 10 / 15 / 20 / 30 fps 1 / 3 / 5 / 7.5 / 10 / 12 / 15 / 20 / 30 fps 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 0.1 fps ~ 30 fps 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 IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP FTP Client Alarm image transfer, Periodic image transfer, Active/Passive selectable (When the FTP periodic transmission is failed, backup on an optional SDHC/SD memory card is available.) No. of Simultaneous Users Up to 14 users (Depends on network conditions)	

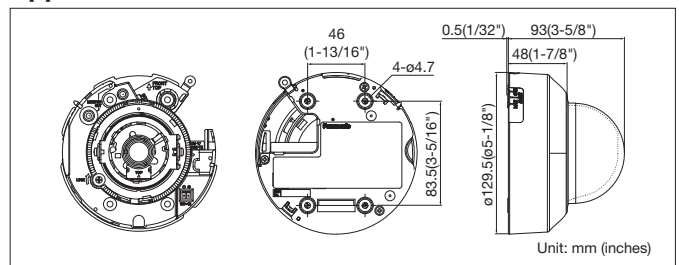
TV System	NTSC	PAL
<b>Network</b>	SDHC/SD Memory Card (Option) H.264 recording: Manual REC / Alarm REC (Pre/Post) JPEG recording: Manual REC / Alarm REC (Post) / Backup upon network failure Compatible SD (SDHC) card: Panasonic 256 MB, 512 MB, 1 GB, 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB* model * SDHC card Face Detection ON / OFF (with XML notification)	
<b>Alarm</b>	Alarm Source 1 terminal input, VMD, Command alarm Alarm Actions SDHC/SD memory recording, E-mail notification, Alarm terminal output, Indication on browser, FTP image transfer, Panasonic protocol output Alarm Log With SDHC/SD memory card: 5,000 logs, without SDHC/SD memory card: 1,000 logs Schedule Alarm / VMD / Access permission	
<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 Microphone/Line Input MIC IN and Line IN are selectable. 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 kΩ	
<b>General</b>	Audio Output ø3.5 mm stereo mini jack (monaural output) Line level External I/O Terminals ALARM IN, ALARM OUT, AUX OUT Safety/EMC Standard UL (UL60065, FCC (Part15 ClassA), CE (EN55022 ClassB, EN55024), C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA)	
<b>Power Source and Power Consumption</b>	12 V DC: 280 mA, PoE (IEEE 802.3af): 3.5 W (Class 2 device)	
<b>Ambient Operating Temperature/Humidity</b>	-10 °C ~ +50 °C (14 °F ~ 122 °F), 90 % or less (without condensation)	
<b>Dimensions</b>	ø129.5 mm x 93 mm (H) (ø15-1/8" x 3-5/8" (H))	
<b>Mass (approx.)</b>	370 g (0.82 lbs.)	

\*1 H.264 and MPEG-4 are alternative. \*2 [4 : 3] and [16 : 9] are alternative.

## 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.  
 – UniPhier is a registered trademark of Panasonic Corporation.  
 – "Super Dynamic", "SDII", "SDIII", "SD5", "SD5Link", "i-PRO" and "i-PRO SmartHD" 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.

- All TV pictures are simulated.
- Masses 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-061EL)