



### 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®”, 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)
- VIQS (Variable Image Quality on Specified area) technology allows the designated area to retain higher image quality while the excluded area will have a decreased image quality, which enables to use lower image file size and bit rate.
- 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 extra zoom at VGA resolution
- 2x, 4x digital zoom controlled by browser
- Camera title display: Up to 20 alphanumeric characters on the browser, Up to 20 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: English / Italian / French / German / Spanish / Russian / Chinese / Japanese
- IPv4/IPv6 protocol supported
- Supports DDNS (viewnetcam, RFC2136)
- Still images (JPEG) can be viewed on mobile phones via Internet.
- Analog Monitor output for easier installation
- 2.8 mm ~ 10 mm, 3.6x Varifocal Auto Iris lens
- ONVIF compliant model

#### Standard Accessories

• Installation Guide .....	1 pc.	• Installation Template Label .....	1 pc.
• CD-ROM*1 .....	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

<p>Embedded Ceiling Mount Bracket (Sail white) <b>WV-Q174</b></p> 	<p>Smoke Dome Cover <b>WV-CF55</b></p> 	<p>Ceiling Mount Bracket <b>WV-Q105</b> (PAL only)</p> 
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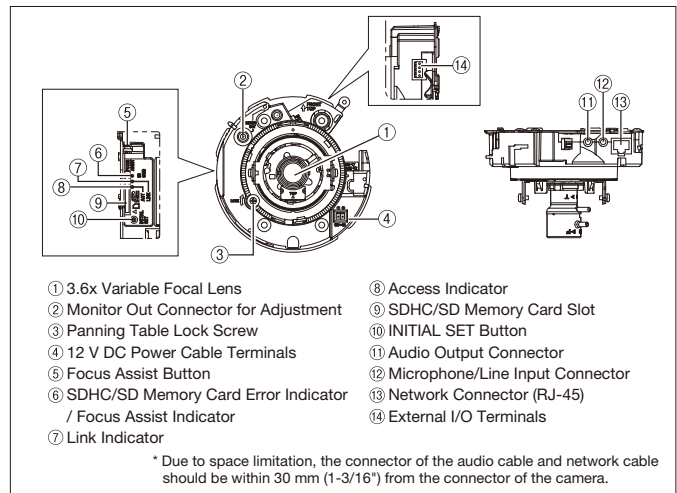
## Specifications

TV System	NTSC	PAL
<b>Camera</b>	Image Sensor	
	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) (3/16 inches (H) x 5/32 inches (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 (Only at Wide Dynamic Range: ON)	
	Face Wide Dynamic Range	
	ON / OFF (Only at Wide Dynamic Range: OFF)	
Adaptive Black Stretch		
ON (LOW, MID, HIGH) / OFF		
AGC		
OFF / AUTO (Max. 2x (2/30 s), 4x (4/30 s), 6x (6/30 s), 10x (10/30 s), 16x (16/30 s))		
Electronic Sensitivity UP		
AUTO / OFF		
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		
VIQS		
ON / OFF		
Camera Title (OSD)		
Up to 20 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° (counterclockwise) 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 (Auto / 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, Italian, French, German, Spanish, Russian, Chinese, Japanese		
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® 9.0 (32 bit), Windows® Internet Explorer® 8.0 (32 bit), Windows® Internet Explorer® 7.0 (32 bit), Microsoft® Internet Explorer® 6.0 SP3		
<b>Network</b>	Network IF	
	10Base-T / 100Base-TX, RJ-45 connector	
	Image Resolution	Aspect ratio:
		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:	H.264: 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps [16 : 9] JPEG: 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps
		H.264/MPEG-4
	Constant bitrate / Framerate priority / Best effort	
	Frame Rate	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 / 8,096* kbps / Unlimited * H.264 mode only	
	Image Quality	
	LOW / NORMAL / FINE	
	Refresh Interval	
	0.2 s / 0.25 s / 0.33 s / 0.5 s / 1 s / 2 s / 3 s / 4 s / 5 s	
	Transmission Type	
UNICAST / MULTICAST		
JPEG	Image Quality	
	10 steps	
Transmission Type		
PULL / PUSH		
Audio Compression		
G.726 (ADPCM) 32 kbps / 16 kbps, G.711 64 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, DHCPv6, ICMPv6 IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP		
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)		

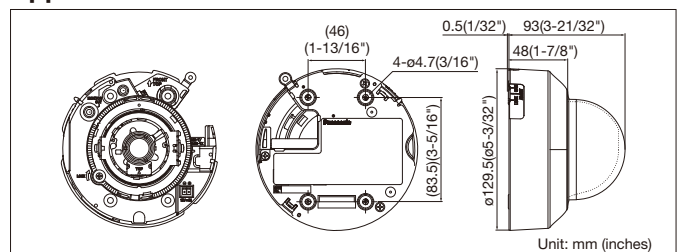
TV System	NTSC	PAL
<b>Network</b>	SDHC/SD Memory Card (Option)	
	H.264 recording: Manual REC / ALARM REC (Pre/Post) JPEG recording: Manual REC / Alarm REC (Post) / Backup upon network failure Compatible SD (SDHC) card: Panasonic 256 MB, 512 MB, 1 GB, 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB* model * SDHC card	
Face Detection		ON / OFF (with XML notification)
Cellular Phone Compatibility		JPEG image
Mobile Terminal Compatibility <sup>3</sup>		iPad, iPhone, iPod touch (iOS 4.2.1 or later), Android™ mobile terminals
<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 / H.264 recording
<b>Input/ Output</b>	Monitor Output (for adjustment)	
	1.0 V [p-p] / 75 Ω	1.0 V [p-p] / 75 Ω
	NTSC composite, RCA Jack	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		
Audio Output		ø3.5 mm stereo mini jack (monaural output) Line level
External I/O Terminals		ALARM IN, ALARM OUT, AUX OUT
<b>General</b>	Safety/EMC Standard	
	UL (UL60065), FCC (Part15 ClassA), C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA)	CE (EN55022 ClassB, EN55024)
	Power Source and Power Consumption	
	12 V DC: 280 mA, PoE (IEEE 802.3af): 3.5 W (Class 2 device)	
	Ambient Operating Temperature/Humidity	
	-10 °C ~ +50 °C (14 °F ~ 122 °F), Less than 90 % (no condensation)	
	Dimensions	
ø129.5 mm x 93 mm (H) (ø5-3/32 inches x 3-21/32 inches(H))		
Mass (approx.)		
370 g (0.82 lbs.)		

\*1 H.264 and MPEG-4 are alternative. \*2 [4 : 3] and [16 : 9] are alternative. \*3 For further information about compatible devices, refer to our website (<http://panasonic.net/pss/security/support/info.html>).

## Part Names and Functions



## Appearance



### Trademarks and registered trademarks

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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.
- 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.

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