Panasonic
ideas for life

HD Network Camera
WV-SP305

HD/1,280 x 960 H.264 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 F1.4
- 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 / ELC / Fixed electronic shutter
  Outdoor / Indoor: Electronic shutter and ALC lens iris control are automatically controlled depending on the mode and luminance level.
  ELC: Up to 1/10,000 Electronic shutter is automatically applied for a fix iris lens.
  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
- ONVIF compliant model

Standard Accessories

- CD-ROM*1 .....1 pc.
- Installation Guide .....1 pc.
- Code Label*2 ..... 1 pc.

The followings are for installation.
- Power Cord Plug ..... 1 pc.
- Safety Wire Plate for Ceiling..... 1 pc.
- Safety Wire Lug for Wall.....1 pc.
- Wire Lug Fixing Screws (M2.5 x 8) .....2 pcs. (incl. 1 spare)

*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 Accessory

1/3 type High Resolution 2x Varifocal Lens
WV-LZA62/2
(2.8 ~ 6 mm)
F1.4 (Wide)
F2.1 (Tele)

* It is impossible to use lenses without the focus adjustment function or zoom lenses.

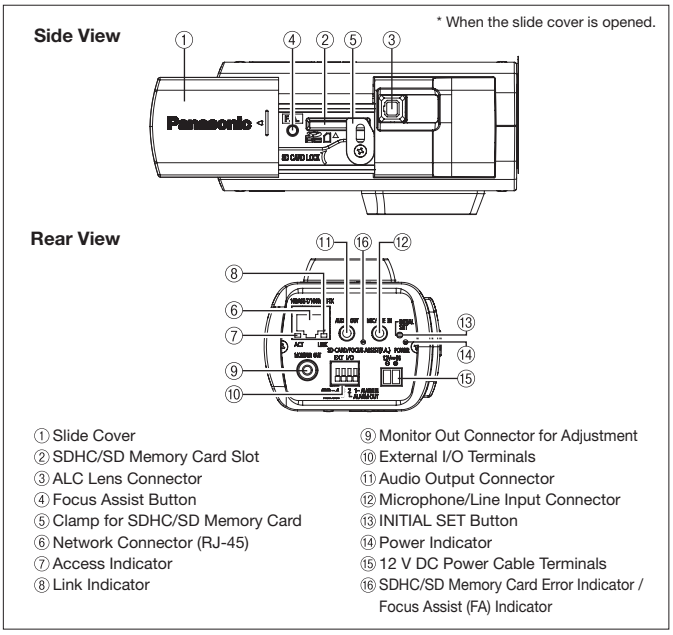
Specifications

TV System		NTSC	PAL
Camera	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)	
	Minimum Illumination	Color: 0.3 lx, B/W: 0.2 lx at F1.4 (Shutter: 1/30 s, AGC: High), Color: 0.019 lx, B/W: 0.013 lx at F1.4 (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) ELC: (up to 1/10,000 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	OFF / 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	
Browser GUI	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)	
Network	Network IF	10Base-T / 100Base-TX, RJ-45 connector	
	Image Resolution *1 *2 — Aspect ratio: [4 : 3]	H.264: 1,280 × 960 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps MPEG-4: VGA (640 × 480) / QVGA (320 × 240), up to 30 fps JPEG: 1,280 × 960 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps	
	Image Resolution *1 *2 — Aspect ratio: [16 : 9]	H.264: 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps JPEG: 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps	
	H.264/ MPEG-4 *1 — Transmission Mode	Constant bitrate / Framerate priority	
	H.264/ MPEG-4 *1 — Frame Rate	1 / 3 / 5 / 7.5 / 10 / 15 / 20 / 30 fps	1 / 3 / 5 / 7.5 / 10 / 12 / 15 / 20 / 30 fps
	H.264/ MPEG-4 *1 — 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	
	H.264/ MPEG-4 *1 — Image Quality	LOW / NORMAL / FINE	
	H.264/ MPEG-4 *1 — Refresh Interval	0.2 s / 0.33 s / 0.5 s / 1 s / 2 s / 3 s / 4 s / 5 s	
	H.264/ MPEG-4 *1 — Transmission Type	UNICAST / MULTICAST	
	JPEG — Image Quality	10 steps	
	JPEG — 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
Network	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)	
Alarm	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	
Input/ Output	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	
	Audio Output	ø3.5 mm stereo mini jack (monaural output) Line level	
	External I/O Terminals	ALARM IN, ALARM OUT, AUX OUT	
General	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 Consumption	12 V DC: 270 mA, PoE (IEEE 802.3af): 3.4 W (Class 2 device)	
	Ambient Operating Temperature/Humidity	−10 °C ~ +50 °C (14 °F ~ 122 °F), 90 % or less (without condensation)	
	Dimensions	75 mm (W) x 65 mm (H) x 132.5mm (L) (2-15/16" (W) x 2-9/16" (H) x 5-3/16" (L))	
	Mass (approx.)	390 g (0.86 lbs.)	

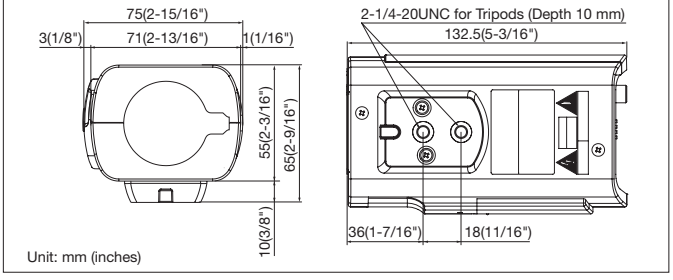
*1 H.264 and MPEG-4 are alternative. *2 [4 : 3] and [16 : 9] are alternative.

Part Names and Functions



① Slide Cover
② SDHC/SD Memory Card Slot
③ ALC Lens Connector
④ Focus Assist Button
⑤ Clamp for SDHC/SD Memory Card
⑥ Network Connector (RJ-45)
⑦ Access Indicator
⑧ Link Indicator
⑨ Monitor Out Connector for Adjustment
⑩ External I/O Terminals
⑪ Audio Output Connector
⑫ Microphone/Line Input Connector
⑬ INITIAL SET Button
⑭ Power Indicator
⑮ 12 V DC Power Cable Terminals
⑯ SDHC/SD Memory Card Error Indicator / Focus Assist (FA) Indicator

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.
– ONVIF and the ONVIF logo are trademarks of ONVIF Inc.

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-058GL)