Panasonic

Super Dynamic HD Dome Network Camera
WV-SC386

HD/1,280 x 960 H.264 Camera featuring Optical 36x zoom and *Super Dynamic*

Key Features

- 720p HD images up to 30 fps
- Newly developed 1.3 Megapixel double speed 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
- **36x optical zoom** with 12x digital zoom enabling 432x zoom.
  72x extra optical zoom at VGA resolution with 12x digital zoom enabling 864x zoom.
- ***Super Dynamic*** and ABS (Adaptive Black Stretch) technologies deliver 128x wider dynamic range compared with conventional cameras.
- ***Face Super Dynamic*** technology ensures clear face image.
- H.264 and MPEG-4 are selectable for system migration.
- High sensitivity with Day/Night function : 0.5 lx (Color), 0.06 lx (B/W) at F1.4 (Wide)
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise and motion blur in various conditions.
- 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.
- **360 degrees endless Panning**
- Advanced auto tracking: tracking: The camera automatically pans and tilts to follow a moving subject and keep it in the center of the image.
- PTZ control can be taken very smoothly 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.
- Up to 256 preset positions
- 360 map shot: 8 thumbnail images at 45 deg. intervals make it simple to direct the camera easily by clicking on a thumbnail.
- Industrial grade Pan/Tilt/Zoom mechanism for high reliability
- VMD (Video Motion Detection) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Privacy Zone can mask up to 8 private areas, such as house windows and entrances/exits.
- Alarm sources including 3 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.
- Multi-language: English / Italian / French / German / Spanish / Russian / Chinese / Japanese
- IPv4/IPv6 protocol supported
- Analog Monitor output for easier installation
- Supports SSL, DDNS (viewnetcam, RFC2136)
- Still images (JPEG) can be viewed on mobile phones via Internet.
- ONVIF compliant model
- Supports Power over Ethernet (PoE) IEEE 802.3af
- Fog compensation

Standard Accessories

- CD-ROM*1 .....1 pc.
- Installation Guide.....1 pc.

The followings are for installation.

- Camera Mount Bracket .....1 pc.
- Camera Fixing Screw (M3) ..... 2 pcs. (incl. 1 spare)
- Decorative Cover.....1 pc.
- Power Cord Plug .....1 pc.
- Code Label*2 .....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 Accessory

Ceiling Mount Bracket **WV-Q105**	Embedded Ceiling Mount Bracket **WV-Q126**	Wall Mount Bracket **WV-Q118A**	Smoke Dome Cover **WV-CS4S**

Specifications

TV System			NTSC	PAL
Camera	Image Sensor		1/4 type MOS Sensor	
	Effective Pixels		Approx. 1.3 megapixel	
	Scanning Mode		Progressive scan	
	Scanning Area		3.6 mm (H) x 2.7 mm (V) {5/32 inches (H) × 11/100 inches (V)}	
	Minimum Illumination		Color: 0.5 lx, B/W: 0.06 lx at F1.4 (Shutter: 1/30 s, AGC: High), Color: 0.031 lx, B/W: 0.004 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		Indoor scene (50 Hz / 60 Hz) / Outdoor scene / Fix shutter	
	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	
	Super Dynamic		ON / OFF	
	Face Super Dynamic		ON / OFF (Only at Super Dynamic: ON)	
	Dynamic Range		52 dB typical (Super Dynamic: ON, Light Control mode: Indoor)	
	Adaptive Black Stretch		ON / OFF	
	AGC		ON (LOW, MID, HIGH) / OFF	
	Electronic Sensitivity UP		OFF, max. 2/30 s, max. 4/30 s, max. 6/30 s, max. 10/30 s, max. 16/30 s	
	Black and White Mode		Mode: AUTO1 / AUTO2 / AUTO3 / ON / OFF	
	Digital Noise Reduction		High / Low	
	Video Motion Detection		4 areas, Sensitivity: 15 steps, Detection size: 10 steps	
	Privacy Zone		Up to 8 zones, Gray / Mosaic	
	Auto Image Stabilizer		ON / OFF	
	Camera Title (OSD)		Up to 20 alphanumeric characters (3 selectable character sizes)	
Lens	Focal Length		3.3 mm ~ 119 mm	
	Zoom Ratio		36x / 72x with extra optical zoom (at VGA)	
	Digital (Electronic) Zoom		12x (Max. 864x combined with extra optical zoom at VGA)	
	Angular Field of View		H: 1.7° (Tele) ~ 60.2° (Wide), V: 1.3° (Tele) ~ 46.0° (Wide)	
	Maximum Aperture Ratio		1 : 1.4 (Wide) ~ 4.8 (Tele)	
	Focusing Range		2.0 m ~ ∞	
	Aperture Range		F1.4 ~ 22, Close	
Pan and Tilt	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		–15° ~ 185° (upward-level-downward) Tilting angle limit: 10° / 5° / 3° / 0° / –3° / –5° / –10° / –15°	
	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		preset sequence / auto pan / auto track / patrol	
	Image Hold		ON / OFF	
	PTZ Position Display		ON / OFF	
	Self Return		10 s / 20 s / 30 s / 1 min / 2 min / 3 min / 5 min / 10 min / 20 min / 30 min / 60 min	
	Map Shot		360° map shot / preset map shot	
Browser GUI	Camera Control		Pan/Tilt (16 steps), Zoom, Focus, Click centering, Drag zoom, Iris, Preset position call and program, Auto mode	
	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.	
	Camera Title		Up to 20 alphanumeric characters	
	Clock Display		Time: 12H / 24H, Date: 5 formats on the browser, Summer time (Manual/AUTO)	
	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 *1 *2 *3		Microsoft® Windows® 8, Microsoft® Windows® 7 Microsoft® Windows Vista®, Microsoft® Windows® XP SP3	
	Supported Browser		Windows® Internet Explorer® 10.0 (32 bit) 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	
Network	Network IF		10Base-T / 100Base-TX, RJ-45 connector	
	Image Resolution *4 *5	Aspect ratio: [4 : 3]	H.264: 1,280 × 960 / 800 × 600 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps MPEG-4: VGA (640 × 480) / QVGA (320 × 240), up to 30 fps JPEG (MJPEG): 1,280 × 960 / 800 × 600 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps	
		Aspect ratio: [16 : 9]	H.264: 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps JPEG (MJPEG): 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps	
	H.264/ MPEG-4 *4	Transmission Mode	Constant bitrate / Framerate priority / Best effort / Advanced VBR	
		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 / 8,192* 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 (MJPEG)	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, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6 IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP,FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP	

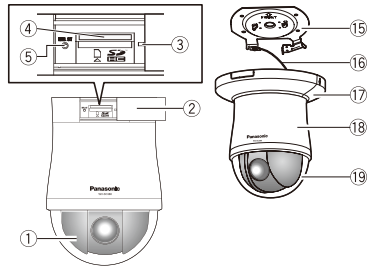
TV System		NTSC	PAL
Network	FTP Client	Alarm image transfer, Periodic image transfer (When the FTP periodic transmission is failed, backup on an optional SDHC/SD memory card is available.)	
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)	
	SDHC/SD Memory Card (Option)	H.264 recording: Manual REC / Alarm REC (Pre/Post) / Schedule REC 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	
	Cellular Phone Compatibility	JPEG image, panning/tilting/zoom control, AUX control (by access level)	
Alarm	Alarm Source	3x Terminal inputs, VMD, Command alarm , Auto track	
	Alarm Actions	SD memory recording, E-mail notification, Indication on browser, Camera positioning, Preset position 1 ~ 64, FTP image transfer, Terminal output, Panasonic protocol output, Auto track	
	Alarm Log	With SD memory card: 5,000 logs, Without SD memory card: 1,000 logs	
	Schedule	Alarm/VMD/Access permission, Preset position call, Position refresh, H.264 recording	
Input / Output	Monitor Output (for adjustment)	1.0 V [P-P] / 75 Ω, NTSC composite, BNC	1.0 V [P-P] / 75 Ω, PAL composite, BNC
	Microphone/Line Input	MIC IN and Line IN are selectable. ø3.5 mm monaural mini jack (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 1 / DAY/NIGHT IN, ALARM IN 2 / ALARM OUT, ALARM IN 3 / AUX OUT (x1 each)	
General	Safety/EMC Standard	UL (UL60950-1), FCC (Part15 ClassA), C-UL (CAN/CSA C22.2 No.60950-1), DOC (ICES003 ClassA)	CE (EN55022 ClassB, EN55024)
	Power Source/ Consumption	12 V DC: approx. 1A PoE: approx. 48 V 250 mA (IEEE802.3af compliant, Class 0 device)	
	Ambient Operating Temperature/Humidity	–10 °C ~ +50 °C (14 °F ~ 122 °F), 90 % or less (without condensation)	
	Dimensions	ø135 x 196 mm (H) (ø5-31/100" x 7-18/25")	
	Mass (approx.)	Camera: 1.2kg (2.65 lbs) Accessories (Camera mount bracket, decorative cover): Approx. 200 g {0.44 lbs}	

• 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.

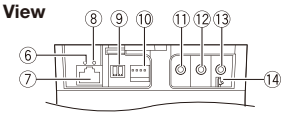
*1 Refer to "Notes on Windows Vista® / Windows® 7 / Windows® 8" on the provided CD-ROM for further information about system requirements for a PC and precautions when using Microsoft® Windows® 8 or Microsoft® Windows® 7 or Microsoft® Windows Vista®.
*2 When using IPv6 for communication, use Microsoft® Windows® 8 or Microsoft® Windows® 7 or Microsoft® Windows Vista®.
*3 Microsoft Windows 7 Starter, Microsoft Windows Vista Starter and Microsoft Windows XP Professional 64-bit Edition are not supported.
*4 H.264 and MPEG-4 are alternative.
*5 [4 : 3] and [16 : 9] are alternative.

Part Names and Functions

Front View

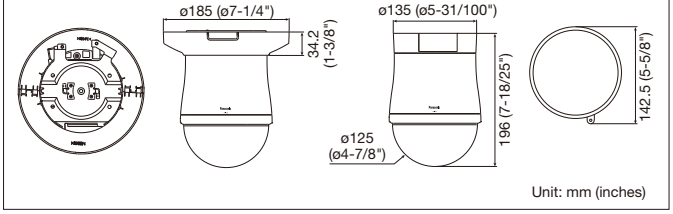


Rear View



① Dome
② SDHC/SD memory Card Slot Cover
③ Live Indicator
④ SDHC/SD Memory Card Slot
⑤ INITIAL SET Button
⑥ Link Indicator(lit when linking)
⑦ Network Connector
⑧ Access Indicator (blinks when accessing)
⑨ 12 V DC Power Supply Terminal
⑩ External I/O Terminals
⑪ Microphone/line Input Connector
⑫ Audio Output Connector
⑬ Monitor Out Connector for Adjustment
⑭ Safety Wire Holder
⑮ Camera Mount Bracket (accessory)
⑯ Safety Wire (fixed with the mount bracket)
⑰ Decorative Cover (accessory)
⑱ Camera
⑲ Dome Cover

Appearance



Unit: mm (inches)

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Important
– Safety Precaution: Carefully read the operating instructions and installation manual before using this product.
– Panasonic cannot be responsible for the performance of the network and/or other manufacturers' products used on the network.

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