

# **Fixed Dome Network Camera WV-SF332**



## SVGA/800 x 600 H.264 Fixed Dome Network Camera

#### **Key Features**

- Super high resolution at SVGA/800 x 600 created by 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 SVGA/800 x 600 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: 0.2 lx (Color), 0.13 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
- ONVIF compliant model

#### **Standard Accessories**

CD-ROM*1	Installation Template L     Cable Tie 2 p
The followings are for installation.  Power Cord Plug	*1 The CD-ROM contains the op (PDFs) and different kinds of t *2 This label may be required for The network administrator sha

#### Label ... .. 1 pc ocs. (incl. 1 spare)

perating instructions tool software programs. or network management. hall retain the code label.

#### **Optional Accessories**

Embedded Ceiling Mount Bracket (AV-light gray) WV-Q168



**Embedded Ceiling** Mount Bracket (Sail white) WV-Q174



Smoke Dome Cover WV-CF5S



Ceiling Mount Bracket WV-Q105

(PAL only)



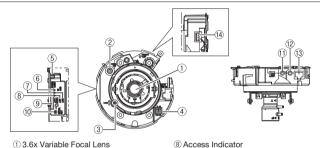
### **Specifications**

TV System			NTSC PAL		
Camera	Image Sen	sor	1/3 type MOS Sensor		
	Effective P	ixels	Approx. 1.3 megapixel		
	Scanning I	Mode	Progressive scan		
	Scanning /		4.8 mm (H) x 3.6 mm (V)		
		llumination	Color: 0.2 lx, B/W: 0.13 lx at F1.3 (Shutter: 1/30 s, AGC: High),		
		narrii aarori	Color: 0.013 lx, B/W: 0.009 lx at F1.3 (Shutter: 16/30 s, AGC: High)		
	White Bala		AWC (2,000 ~ 10,000 K), ATW1 (2,700 ~ 6,000 K), ATW2 (2,000 ~ 6,000 K		
	Light Cont	rol 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 Sp	eed	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 Dyna	ımic Range	ON / OFF		
	Face Wide Dynamic Range				
	Adaptive E	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	y/Night Mode			
	Digital Noi	se 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		
Lens	Vari Focal		2.8 mm ~ 10 mm, 3.6x varifocal		
20110			H: 27.7° (Tele) ~ 100.3° (Wide), V: 20.8° (Tele) ~ 73.5° (Wide)		
	Angular Field of View  Maximum Aperture Ratio				
		·			
	Focusing F	range	0.3 m ~ ∞		
Adjusting Angle			Horizontal: 180° (clockwise), 170° (counter clockwise)		
_	0 0		Vertical: ±75°, Imaging tilt adjustment range: ±100°		
Browser			Brightness, AUX ON / OFF		
GUI	Display Mo	ode	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,		
	SD Memory Data Download		Audio Output: ON / OFF Volume adjustment: Low / Middle / High		
			Still or motion Images recorded in the SDHC/SD memory		
	,		card can be downloaded.		
	GUI/Setup Menu Language				
			(Installation required for French) Spanish, German, Russian		
			(Installation required except for English		
	System Log		Up to 100 (Internal), Up to 4,000 (SDHC/SD memory when the		
	-,	5	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		
	O d D		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		
MahurI-			Microsoft® Internet Explorer® 6.0 SP3 (Microsoft® Windows® XP Professional SP3		
Network	Network IF		10Base-T / 100Base-TX, RJ-45 connector		
	Image		H.264: 800 × 600 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps		
	Resolution	[4:3]	MPEG-4: VGA (640 × 480) / QVGA (320 × 240), up to 30 fps		
	*1 *2		JPEG: 800 × 600 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fp		
			H.264: 640 × 360 / 320 × 180, up to 30 fps		
		[16 : 9]	JPEG: 640 × 360 / 320 × 180, up to 30 fps		
	H.264/	Transmission	Constant bitrate / Framerate priority		
	MPEG-4	Mode			
	*1	Frame Rate	1/3/5/7.5/10/15/20/ 1/3/5/7.5/10/12/15/		
			30 fps 20 / 30 fps		
		Bit Rate/	64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072		
		Client	4,096 / 8,192* kbps / Unlimited * H.264 mode only		
		Image Quality			
			0.2 s / 0.33 s / 0.5 s / 1 s / 2 s / 3 s / 4 s / 5 s		
			UNICAST / MULTICAST		
	JPEG	Image Quality			
	1	Transmission Type	PULL / PUSH		
			G.726 (ADPCM) 32 kbps / 16 kbps		
	Audio Con	npression	OFF / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex)		
	Audio Con Audio Mod				
	Audio Mod	le			
	Audio Mod Authentica	le tion for Audio	OFF / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplet Level 1 only / Level 2 higher / All users		
	Audio Mod Authentica Total Bit R	le tion for Audio ate	OFF / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex Level 1 only / Level 2 higher / All users 64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimite		
	Audio Mod Authentica	le tion for Audio ate	OFF / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex Level 1 only / Level 2 higher / All users 64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimite IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMF		
	Audio Mod Authentica Total Bit R	le tion for Audio ate	OFF/Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex) Level 1 only / Level 2 higher / All users 64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimite IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMF IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP,		
	Audio Mod Authentica Total Bit R Supported	le tion for Audio ate	OFF/Mic (Line) input/Audio output/ interactive (Half duplex) / Interactive (Full duplex) Level 1 only / Level 2 higher / All users 64/128/ 256/384/512/768/1,024/2,048/4,096/8,192 kbps / Unlimite IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMf IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP		
	Audio Mod Authentica Total Bit R	le tion for Audio ate	OFF/Mic (Line) input/Audio output/ interactive (Half duplex) / Interactive (Full duplex Level 1 only / Level 2 higher / All users 64/128/256/384/512/768/1,024/2,048/4,096/6,192 kbps / Unlimite IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMF IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP Alarm image transfer, Periodic image transfer, Active/Passive		
	Audio Mod Authentica Total Bit R Supported	le tion for Audio ate	OFF/Mic (Line) input/Audio output/ interactive (Half duplex) / Interactive (Full duplex) Level 1 only / Level 2 higher / All users 64/128/ 256/384/512/768/1,024/2,048/4,096/8,192 kbps / Unlimite IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMf IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP		

TV System		NTSC	PAL		
Network	SDHC/SD Memory Card	H.264 recording: Manual REC / Alarm REC (Pre/Post)			
	(Option)	JPEG recording: Manual REC / Alarm REC (Post) / Backup upon			
		network failure Compatible SD (SDHC) card: Panasonic			
		512 MB, 1 GB, 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB* model * SDHC ca			
	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, Ala				
		Indication on browser, FTP image to	FTP image transfer, Panasonic protocol output		
	Alarm Log	With SDHC/SD memory card: 5,000 logs, without SDHC/SD memory card: 1,000 logs  Alarm / VMD / Access permission			
	Schedule				
Input/	Monitor Output	1.0 V [p-p] / 75 Ω,	1.0 V [p-p] / 75 Ω,		
Output	(for adjustment)	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 outp		aural output) Line level		
	External I/O Terminals	ALARM IN, ALARM OUT, AUX OUT			
General	Safety/EMC Standard	UL (UL60065), FCC (Part15 ClassA),	CE (EN55022 ClassB, EN55024)		
		C-UL (CAN/CSA C22.2 No.60065),			
		DOC (ICES003 ClassA)			
	Power Source and	12 V DC: 280 mA, PoE (IEEE 802.3af): 3.5 W (Class 2 device)			
	Power Consumption				
	Ambient Operating	-10 °C ~ +50 °C (14 °F ~ 122 °F),			
	Temperature/Humidity	90 % or less (without condensation)			
	Dimensions ø129.5 mm x 93 mm (H) (ø5-1/8" x 3-5/8" (H))		3" x 3-5/8" (H))		
	Mass (approx.)	370 g (0.82 lbs.)			

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

#### **Part Names and Functions**



- 1 3.6x Variable Focal Lens
- ② Monitor Out Connector for Adjustment
- ③ Panning Table Lock Screw
- 4 12 V DC Power Cable Terminals ⑤ Focus Assist Button
- 6 SDHC/SD Memory Card Error Indicator
- / Focus Assist Indicator
- ① Link Indicator
  - \* Due to space limitation, the connector of the audio cable and network cable should be within 30 mm (1-3/16") from the connector of the camera.

SDHC/SD Memory Card Slot

Microphone/Line Input Connector

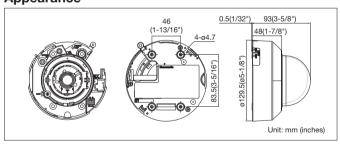
10 INITIAL SET Button

① Audio Output Connector

(4) External I/O Terminals

(3) Network Connector (RJ-45)

### **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", "SDII", "SD5", "SD5Link", "i-PRO" and "i-PRO SmartHD" logos are trademarks or registered trademarks of Panasonic Corporation.
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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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