

# HD Fixed Dome Network Camera WV-SF336

NTSC WV-SF336 (12 V DC or PoE)

PAL WV-SF336 (12 V DC or PoE)

## **Preliminary**



## HD H.264 Fixed Dome Network Camera with ABF (Auto Back Focus)

### **Key Features**

- 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
- 720 / 30p (HD) H.264 stream in 16: 9 aspect ratio
- 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 lux (Color), 0.2 lux (B/W) at F1.3 (Wide)
- ABF (Auto Back Focus) ensures easy installation and stable focus in both color and B/W modes.
- 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 detect the position of human face, 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 SD/SDHC 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.
- SD/SDHC 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 SD/SDHC 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 pc.
 The followings are for installation.

 • Installation Guide
 1 pc.
 • Power Cable Plug
 1 pc.

 • Code Label
 1 pc.
 • External I/O Cable Plug
 1 pc.

 • Template for installation
 1 pc.
 • Template for installation
 1 pc.

 • Cable tie
 • Cable tie
 2 pcs. (incl. a spare tie)

#### **Optional Accessories**

Embedded Ceiling Mount Bracket WV-Q168



Smoke Dome Cover WV-CS5S



Ceiling Mount Bracket
WV-Q105
(PAL only)



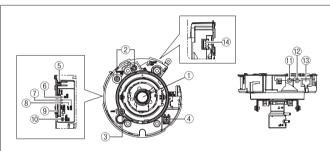
## Specifications

	1		NTSC	PAL	
Camera	Image Sen	sor	1/3 inch MOS Sensor		
	Effective Pixels		1.3 megapixel		
	Scanning Mode		Progressive scan		
	Scanning Area		4.8 mm (H) x 3.6 mm (V)		
	Minimum Illumination		Color: 0.3 lux, B/W: 0.2 lux at F1.3 (Shutter: 1/30 s, AGC: High),		
	IVIII III III III III III III III III I				
	White Balance		Color: 0.019 lux, B/W: 0.013 lux at F1.3 (Shutter: 16/30 s, AGC: High)		
			AWC (2,000 ~ 10,000 K), ATW1 (2,700 ~ 6,000 K), ATW2 (2,000 ~ 6,000 K) Outdoor: Automatic integration of ALC and ELC Indoor [50 Hz]: Automatic integration of ALC and ELC (up to 1/100 sec.) Indoor [60 Hz]: Automatic integration of ALC and ELC (up to 1/120 sec.) 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		
	Light Conti	rol Mode			
	Shutter Sp	eed			
	Wide Dynamic Benge			2,000, 1/4,000, 1/10,000	
	Wide Dynamic Range		ON / OFF		
	Face Wide Dynamic Range				
	Adaptive Black Stretch		ON / OFF (Only at Wide Dynamic Range: OFF)		
	AGC		ON (LOW, MID, HIGH) / OFF		
	Electronic Sensitivity UP				
	Simple Day/Night Mode				
	Digital Noise Reduction		High / Low		
	Video Motion Detection		4 areas, Sensitivity: 15 steps, D	etection size: 10 steps	
	Privacy Zone		Up to 2 zones, Gray		
	Camera Title (OSD)		Up to 16 alphanumeric characters		
Lama	Back Focus Adjustment				
Lens	Vari Focal Length		2.8 mm ~ 10 mm		
	Angular Field of View		H: 28.0° (Tele) ~ 100° (Wide), V: 21.0° (tele) ~ 74.0° (Wide)		
	Maximum A	Aperture Ratio	1: 1.3 (Wide) ~ 1: 3.1 (Tele)		
	Focusing Range		0.3 m ~ ∞		
Pan and T			Panning Range: -170° ~ +180°, Tilting Range: ±75°, Azimuth Range: ±100		
Browser	Camera Co	ontrol	Brightness, AUX ON / OFF		
	_		5		
GUI	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 Tit	le	Up to 20 alphanumeric characters		
	Clock Display		Time: 12H/24H, Date: 5 formats on the browser, Summer time (Manual)		
	Alarm Con	-			
			Reset		
	One Shot Capture		A still picture will be displayed on a newly opened window.		
	Audio		Mic (Line) Input: ON / OFF Volume	e adjustment: Low / Middle / High,	
			Audio Output: ON / OFF Volume adjustment: Low / Middle / High		
	SD Memory	Data Download	Still or motion Images recorded in the SD/SDHC memory		
	' '		card can be downloaded.		
	0.11/0 : 14				
	GUI/Setup Menu Language System Log		English, French	English, French, Italian,	
			(Installation required for French)	Spanish, German, Russian	
				(Installation required except for English)	
			Up to 100 (Internal), Up to 4,000	(SD/SDHC memory when the	
	-	_	recording format is set to JPEG		
	Supported	06			
	Supported OS Supported Browser		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		
			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	Aspect ratio:	H.264: 1,280 × 960 / VGA (640 × 48	<ol><li>QVGA (320 × 240), up to 30 fps</li></ol>	
	Resolution	[4:3]	MPEG-4: VGA (640 × 480) / QV	GA (320 × 240), up to 30 fps	
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	1		.IPFG: 1 280 x 960 / VGA (640 x 48	0) / QVGA (320 x 240) up to 30 fps	
	*1 *2	Aspect ratio			
	1		H.264: 1,280 × 720 / 640 × 360	/ 320 × 180, up to 30 fps	
	*1 *2	[16:9]	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps	
	*1 *2 H.264/	[16 : 9] Transmission	H.264: 1,280 × 720 / 640 × 360	/ 320 × 180, up to 30 fps	
	*1 *2	[16:9]	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps	
	*1 *2 H.264/	[16 : 9] Transmission	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps	
	*1*2 H.264/ MPEG-4	[16 : 9] Transmission Mode	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps ority 1/3/5/7.5/10/12	
	*1*2 H.264/ MPEG-4	[16 : 9] Transmission Mode Frame Rate	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/ 30 fps	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps ority 1/3/5/7.5/10/12 (PAL model only)/15/20/30 fps	
	*1*2 H.264/ MPEG-4	[16 : 9] Transmission Mode Frame Rate	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/ 30 fps 64/128/256/384/512/768	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps ority 1 / 3 / 5 / 7.5 / 10 / 12 (PAL model only) / 15 / 20 / 30 fps / 1,024 / 1,536 / 2,048 / 3,072 /	
	*1*2 H.264/ MPEG-4	[16 : 9] Transmission Mode Frame Rate Bit Rate/ Client	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/ 30 fps 64 / 128 / 256 / 384 / 512 / 768 4,096 / 8,192* kbps / Unlimited	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps ority 1 / 3 / 5 / 7.5 / 10 / 12 (PAL model only) / 15 / 20 / 30 fps / 1,024 / 1,536 / 2,048 / 3,072 /	
	*1*2 H.264/ MPEG-4	[16:9] Transmission Mode Frame Rate Bit Rate/ Client Image Quality	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/ 30 fps 64 / 128 / 256 / 384 / 512 / 768 4,096 / 8,192* kbps / Unlimited LOW / NORMAL / FINE	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps ority 1 / 3 / 5 / 7.5 / 10 / 12 (PAL model only) / 15 / 20 / 30 fps / 1,024 / 1,536 / 2,048 / 3,072 /	
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	H.264/ MPEG-4	[16:9] Transmission Mode Frame Rate  Bit Rate/ Client Image Quality Refresh Interval Transmission Type Image Quality Transmission Type	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360 Constant bitrate / Framerate pri 1/3/5/7.5/10/15/20/ 30 fps 64 / 128 / 256 / 384 / 512 / 768 4,096 / 8,192* kbps / Unlimited LOW / NORMAL / FINE 0.1 fps ~ 30 fps UNICAST / MULTICAST 10 steps PULL / PUSH	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps ority 1 / 3 / 5 / 7.5 / 10 / 12 (PAL model only) / 15 / 20 / 30 fps / 1,024 / 1,536 / 2,048 / 3,072 / * H.264 mode only	
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	H.264/ MPEG-4 "1  JPEG  Audio Com Audio Mod Authentica Total Bit R: Supported	[16:9] Transmission Mode Frame Rate Bit Rate/ Client Image Quality Refresh Interval Transmission Type Image Quality Transmission Type pression e tion for Audio ate	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360 Constant bitrate / Framerate pri 1/3 / 5 / 7.5 / 10 / 15 / 20 / 30 fps 64 / 128 / 256 / 384 / 512 / 768 4,096 / 8,192* kbps / Unlimited LOW / NORMAL / FINE 0.1 fps ~ 30 fps UNICAST / MULTICAST 10 steps PULL / PUSH G.726 (ADPCM) 32 kbps / 16 kt 0FF / Mic (Line) input / Audio output / Inter Level 1 only / Level 2 higher / A 64 / 128 / 256 / 384 / 512 / 768 / 1,024 FPV6: TCP/IP, UDP/IP, HTTP, RT IPV6: TCP/IP, UDP/IP, HTTP, RT SMTP, DHCP, DNS, DDNS, NT	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps ority 1 / 3 / 5 / 7.5 / 10 / 12 (PAL model only) / 15 / 20 / 30 fps / 1,024 / 1,536 / 2,048 / 3,072 / * H.264 mode only pps active (Half duplex) / Interactive (Full duplex) I users / 2,048 / 4,096 / 8,192 kbps / Unlimited P, FTP, SMTP, DNS, NTP, SNMP TSP, RTP, RTP/RTCP, FTP, P, SNMP	
	H.264/ MPEG-4 11  JPEG  Audio Com Audio Mod Authentica	[16:9] Transmission Mode Frame Rate Bit Rate/ Client Image Quality Refresh Interval Transmission Type Image Quality Transmission Type pression e tion for Audio ate	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360 Constant bitrate / Framerate pri 1/3 / 5 / 7.5 / 10 / 15 / 20 / 30 fps 64 / 128 / 256 / 384 / 512 / 768 4,096 / 8,192* kbps / Unlimited LOW / NORMAL / FINE 0.1 fps ~ 30 fps UNICAST / MULTICAST 10 steps PULL / PUSH G.726 (ADPCM) 32 kbps / 16 kt OFF / Mic (Line) input / Audio output / Inter Level 1 only / Level 2 higher / A 64 / 128 / 256 / 384 / 512 / 768 / 1,024 IPv6: TCP/IP, UDP/IP, HTTP, RI PV4: TCP/IP, UDP/IP, HTTP, RI SMTP, DHCP, DNS, DDNS, NTI Alarm image transfer, Periodic i	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps ority 1 / 3 / 5 / 7.5 / 10 / 12 (PAL model only) / 15 / 20 / 30 fps / 1,024 / 1,536 / 2,048 / 3,072 / * H.264 mode only pps active (Half duplex) / Interactive (Full duplex) I users / 2,048 / 4,096 / 8,192 kbps / Unlimiter P, FTP, SMTP, DNS, NTP, SNMP TSP, RTP, RTP/RTCP, FTP, ?, SNMP mage transfer, Active/Passive	
	H.264/ MPEG-4 "1  JPEG  Audio Com Audio Mod Authentica Total Bit R: Supported	[16:9] Transmission Mode Frame Rate Bit Rate/ Client Image Quality Refresh Interval Transmission Type Image Quality Transmission Type pression e tion for Audio ate	H.264: 1,280 × 720 / 640 × 360 JPEG: 1,280 × 720 / 640 × 360 Constant bitrate / Framerate pri 1/3 / 5 / 7.5 / 10 / 15 / 20 / 30 fps 64 / 128 / 256 / 384 / 512 / 768 4,096 / 8,192* kbps / Unlimited LOW / NORMAL / FINE 0.1 fps ~ 30 fps UNICAST / MULTICAST 10 steps PULL / PUSH G.726 (ADPCM) 32 kbps / 16 kt 0FF / Mic (Line) input / Audio output / Inter Level 1 only / Level 2 higher / A 64 / 128 / 256 / 384 / 512 / 768 / 1,024 FPV6: TCP/IP, UDP/IP, HTTP, RT IPV6: TCP/IP, UDP/IP, HTTP, RT SMTP, DHCP, DNS, DDNS, NT	/ 320 × 180, up to 30 fps / 320 × 180, up to 30 fps ority  1 / 3 / 5 / 7.5 / 10 / 12 (PAL model only) / 15 / 20 / 30 fps / 1,024 / 1,536 / 2,048 / 3,072 / * H.264 mode only  pps active (Half duplex) / Interactive (Full duple) I users / 2,048 / 4,096 / 8,192 kbps / Unlimited P, FTP, SMTP, DNS, NTP, SNMP TSP, RTP, RTP/RTCP, FTP, P, SMMP mage transfer, Active/Passive dic transmission is failed,	

TV Systen	n	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 upor		
		network failure Compatible SD (SDHC) card: Panasonic 256 MB		
		512 MB, 1 GB, 2 GB, 4 GB*, 8 GB*, 16 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/	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 output) Line level		
	External I/O Terminals	ALARM IN / DAY/NIGHT 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: 320 mA, PoE (IEEE 802.3af): 4.2 W		
	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))		
	Weight (approx.)	410 g (0.9 lbs.)	<u> </u>	

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

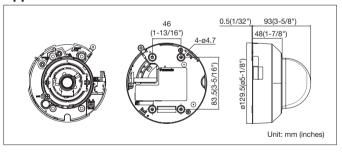
#### **Part Names and Functions**



- 1 3.6x Variable Focal Lens
- 2 Monitor for Adjustment Output Connector
- 3 Panning Table Lock Screw
- 4 12 V DC Power Cable Terminals
- ⑤ ABF Button
- 6 SDHC/SD Memory Card Error Indicator / ABF Indicator
- 7 Link Indicator

- ® Access Indicator
- SDHC/SD Memory Card Slot
- (i) INITIAL SET Button
- 11 Audio Output Connector
- Microphone/Line Input Connector
- 13 Network Connector (RJ-45 Connector) (4) External I/O Terminals

## **Appearance**



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- Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.
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  - Weights 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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