

# Super Dynamic HD Vandal Resistant Dome Network Camera WV-SW155 / WV-SW155M

**Super Dynamic Vandal Resistant Dome Network Camera** 

### WV-SW152 / WV-SW152M

**Preliminary** 



## HD / 1,280 x 960 H.264 Vandal Resistant Network Camera featuring Super Dynamic (wv-sw155) SVGA / 800 x 600 H.264 Vandal Resistant Network Camera featuring Super Dynamic (wv-sw152)

#### **Key Features**

- 720p HD images up to 30 fps (WV-SW155)
- 1.3 Megapixel high sensitivity MOS Sensor
- Super high resolution at SVGA/800 x 600 created by 1.3 Megapixel high sensitivity MOS Sensor (WV-SW152)
- 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 (WV-SW155)
- Full frame (Up to 30 fps) transmission at SVGA (800 x 600) image size (WV-SW152)
- Super Dynamic and ABS (Adaptive Black Stretch) technologies deliver 128x wider dynamic range compared to conventional cameras.
- Face Super Dynamic Range technology ensures clear face image.
- High sensitivity with Day & Night (Electrical) function:
   0.8 lx (Color), 0.6 lx (B/W) at F2.2 (WV-SW155)
   0.6 lx (Color), 0.4 lx (B/W) at F2.2 (WV-SW152)
- 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.
- 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.
- Electronic sensitivity enhancement: Auto (Up to 16x) / OFF
- Selectable light control modes: Indoor scene (50 Hz) / Indoor scene (60 Hz) / ELC (maximum exposure time)
  Indoor scene (50 Hz/60Hz): Flicker caused by fluorescent lightning will be automatically compensated.
  ELC (maximum exposure time): The lightning control will be automatically performed by adjusting shutter speed in the range of ELC.
- 2x extra zoom under VGA resolution
- 2x, 4x digital zoom controlled by browser
- VMD (Video Motion Detection) 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 works with the WJ-ND400 playback VMD function.

- Privacy Zone can mask up to 2 private areas, such as house windows and entrances/exits.
- Camera title display: Up to 20 alphanumeric characters on the browser
- Alarm sources including VMD and Panasonic alarm command can trigger actions such as FTP image transfer, E-mail notification, Indication on browser, and Panasonic alarm protocol output.
- 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 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.
- Internet mode: H.264 images can be transmitted over HTTP protocol.
- Multi-language: English / Italian / French / German / Spanish / Russian / Chinese / Japanese
- IPv4/IPv6 protocol supported
- Supports SSL, DDNS (viewnetcam, RFC2136)
- Still images (JPEG) can be viewed on mobile phones via Internet.
- ONVIF compliant model
- Low profile design for discrete installation
- "Railway applications Electronics equipment used on rolling stock" compatible with EN50155
- Wide coverage (Horizontal: 104 °, Vertical: 85 °)
- IP66 rated water and dust resistant. Compatible with IEC60529 measurement standard.
- Vandal resistant mechanism for high reliability

#### **Standard Accessories**

#### **Specifications**

TV Systen			NTSC PAL	
Camera	Image Sensor		1/3 type MOS image sensor	
	Effective Pixels		Approx. 1.3 megapixels	
	Scanning Mode		Progressive	
	Scanning Area		4.8 mm (H) x 3.6 mm (V) (3/16" (H) x 5/32" (V))	
	Minimum Illumination  White Balance		WV-SW155:	
			Color: 0.8 kx (F2.2, Auto slow shutter: Off (1/30s), Gain:On(High) 0.05 kx (F2.2, Auto slow shutter: Max. 16/30s, Gain:On(High))* BW: 0.6 kx (F2.2, Auto slow shutter: Off (1/30s), Gain:On(High)) 0.04 kx (F2.2, Auto slow shutter: Max. 16/30s, Gain:On(High))* WV-SW152: Color: 0.6 kx (F2.2, Auto slow shutter: Off (1/30s), Gain:On(High)) 0.04 kx (F2.2, Auto slow shutter: Max. 16/30s, Gain:On(High))* BW: 0.4 kx (F2.2, Auto slow shutter: Off (1/30s), Gain:On(High)) 0.03 kx (F2.2, Auto slow shutter: Max. 16/30s, Gain:On(High))	
			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) / ELC	
	ELC	With Super	ELC (1/30 s)	
	(Maximum	Dynamic ON		
	Exposure Time)	With Super Dynamic OFF	ELC (1/30 s), ELC (3/100 s), ELC (3/120 s), ELC (2/100 s), ELC (2/120 s) ELC (1/100 s), ELC (1/120 s), ELC (1/250 s), ELC (1/500 s), ELC (1/1,000 s) ELC (1/2,000 s), ELC (1/4,000 s), ELC (1/10,000 s)	
	Day & Nigh	nt (Electrical)	OFF / AUTO	
	Digital Noise Reduction		HIGH / LOW	
	Face Detection		ON / OFF (with the XML notification setting)	
	Super Dynamic		ON / OFF	
	Dynamic Range		52 dB typ. (Super Dynamic: ON, Light Control: ELC)	
	Adaptive Black Stretch		ON / OFF	
	AGC		ON (HIGH) / ON (MID) / ON (LOW) / OFF	
	Auto Slow Shutter		OFF (1/30 s), Max. 2/30 s, Max. 4/30 s, Max. 6/30 s, Max. 10/30 s, Max. 16/30	
	Video Motion Detection		ON / OFF, 4 areas available	
	Privacy Zone		ON / OFF (up to 2 zones available)	
	VIQS		ON / OFF	
	Camera Title		Up to 20 characters (alphanumeric characters, marks), On/Of	
Lens	Focal Length		1.95 mm	
	Zoom Rati		1x / Extra zoom: 2x (under VGA resolution)	
		Aperture Ratio		
		Ceiling	H: -20° to +20° , V: -20° to +90°	
	Angle	Installation	H: -80° to +80° , V: -90° to +20°	
	Angular Field of View		Horizontal: 104 °, Vertical: 85 °	
Browser GUI	Supported OS *2 *3		Microsoft® Windows® 7, Microsoft® Windows Vista®,	
			Microsoft® Windows® XP SP3	
	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	
Network	Network IF	WV-SW155 / WV-SW152 WV-SW155M /	10Base-T / 100Base-TX, RJ-45 connector (female)  10Base-T / 100Base-TX, M-12 connector (male)	
		WV-SW152M	Tobase 17 Toobase 17, W 12 Soliticolor (Hallo)	
	Image	Aspect ratio:	WV-SW155:	
	Resolution		H.264: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 30 fp JPEG (MJPEG): 1,280 x 960 / 640 x 480 / 320 x 240, up to 30 fp WV-SW152:	
		Aspect ratio: [16 : 9]	H.264: 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps	
			JPEG (MJPEG): 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fp WV-SW152: H.264: 640 x 360 / 320 x 180, up to 30 fps JPEG (MJPEG): 640 x 360 / 320 x 180, up to 30 fps	
		Frame Rate	1/3/5/7.5/10/15/20/30 fps 1/3/5/7.5/10/12/15/20/30 fps	
			Constant Bit Rate / Best effort: 64 kbps / 128 kbps / 256 kbps 384 kbps / 512 kbps / 768 kbps / 1,024 kbps / 1,536 kbps / 2,048 kbps / 3,072 kbps /4,096 kbps / 8,192 kbps (WV-SW155	
		Image Quality	LOW / NORMAL / FINE	
			UNICAST / MULTICAST	
	JPEG		0 SUPER FINE / 1 FINE / 2 / 3 / 4 / 5 NORMAL / 6 / 7 / 8 / 9 LOW (10 steps: 0-	
			PULL / PUSH	
	Transmission Interval		0.1 fps - 30 fps (JPEG frame rate will be restricted when	
	Bondwick C		displaying both JPEG and H.264 images.)	
	Bandwidth Control		64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimite	
	Supported Protocol		Pv6: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv  IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP,   FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP	
	FTP Client		Alarm image transmission, FTP periodic transmission (When the FTP transmission	
	Multi-Screen		is failed, backup on an optional SDHC/SD memory card is available.)	
			Up to 16 camera images can be displayed simultaneously on	
	Maximum Concurrent		a multi-screen. (Including the camera itself)  14 (Depends on network conditions)	
	Access Number			
	SDHC/SD Memory Card (Option)		Manufactured by Panasonic SDHC memory card: 4 GB, 8 GB, 16 GB, 32 GB SD memory card: 256 MB, 512 MB, 1 GB, 2 GB	
			SD memory card: 256 MB, 512 MB, 1 GB, 2 GB (except miniSD card and microSD card)	
	1		DEVCEOU UILLION COLO OLO UILLIONO COLO COLO	

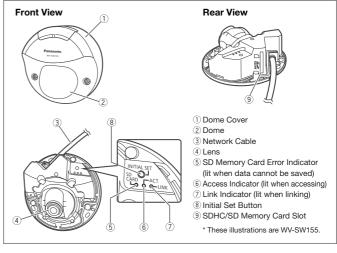
TV Systen	n	NTSC	PAL	
Network	Cellular Phone Compatibility	JPEG image		
	Mobile terminal compatibility	iPad, iPhone, iPod touch		
Alarm	Alarm Source	VMD,Command alarm		
	Alarm Actions	E-mail notification,Indication on browser,FTP image transfer,		
		Panasonic protocol output		
	Alarm Log	ON / OFF		
	Schedule	VMD		
General	Power Source/Consumption	PoE (IEEE802.3af compliant) / PoE 48 V: 56 mA (Class 1 device)		
	Ambient Operating	−30 °C ~ +50 °C (14 °F ~ 122 °F) /		
	Temperature/Humidity	Less than 90 % (no condensation)		
	Waterproof	Camera: IP66 (IEC60529) *5		
	Shock Resistance	Compliant with 50 J IEC60068-2-75		
	Dimensions	ø109 mm x 47 mm (H) (ø6-15/32" x 5-3/4" (H))		
	Mass (approx.)	350 g (0.77 lbs.)		
	Finish	Main body: Aluminum die cast, light gray, Dome section: Clear polycarbonate resin		

<sup>\*1</sup> Converted value

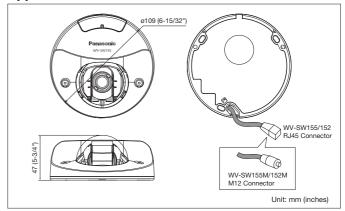
- \*2 Refer to "Notes on Windows Vista® / Windows® 7" on the provided CD-ROM for further information about system requirements for a PC and precautions when using Microsoft® Windows® 7 or Microsoft® Windows Vista®.

  \*3 When using IPv6 for communication, use Microsoft® Windows® 7 or Microsoft® Windows Vista®.
- \*4 Transmission for 2 streams can be individually set in the same compression method.
- \*5 Only when installation work specified in this book is properly performed and appropriate waterproof treatment is performed.

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



#### **Appearance**



#### Trademarks and registered trademarks

- Microsoft, and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.
- iPad, iPhone and iPod touch are registered trademarks of Apple Inc.
   ONVIF and the ONVIF logo are trademarks of ONVIF Inc.
- 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.

#### 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:**

(except miniSD card and microSD card)

