## **Panasonic**



### WV-SW598 PTZ DOME NETWORK CAMERA

- 1080p full HD images up to 30 fps
- 30x optical zoom and 90x extra optical zoom at 640x360 resolution with 12x digital zoom enabling 1080x zoom
- Multiple H.264 and JPEG streams for real-time monitoring and recording
- Super Dynamic and ABS (Adaptive Black Stretch) technologies deliver 128x wider dynamic range compared to conventional cameras
- 360-degree endless panning
- ClearSight<sup>™</sup> dome coating
- Vandal-resistant design
- IP66 rating for being waterproof and dustproof











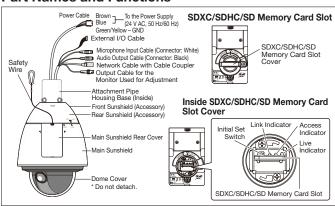




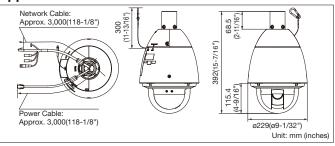
# Superior reliability and functionality for improved outdoor surveillance

With full HD 1080p image quality and 360-degree endless panning, the WV-SW598 PTZ Dome Network Camera provides the crystal-clear surveillance imagery and flexibility needed to fit any outdoor environment. Perfect for complex lighting situations, Super Dynamic and ABS (Adaptive Black Stretch) technologies deliver a 128x wider dynamic range than conventional cameras for increased visibility of subjects in dark areas with no degradation of the image quality in brighter areas within the same video scene. In addition, with its vandal-resistant IP66-rated design and new ClearSight™ rain-resistant dome coating, the WV-SW598 is built to survive in the harshest environments and maintain clear visibility in even the wettest conditions.

### **Part Names and Functions**



#### **Appearance**





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CAMERA		
Image Sensor	Approx.1/3 type MOS Sensor	
Effective Pixels	Approx. 2.4 megapixel	
Scanning Mode	Progressive scan	
Scanning Area	5.38 mm (H) x 3.02 mm (V) {7/32 inches(H) x 1/8 inches(V)}	
Minimum Illumination  White Balance	Color: 0.5 tx, BW: 0.06 tx (F1.6, Auto slow shutter: Off (1/30s), Gain: On(High)) Color: 0.03 tx, BW: 0.004 tx (F1.6, Auto slow shutter: Max. 16/30s, Gain: On(High))  AWG (100s), 10 00s, 10	
Light Control Mode	AWC (2,000 – 10,000 K), ATW1 (2,700 – 6,000 K), ATW2 (2,000 – 6,000 K)	
Light Control Mode	Outdoor scene: Automatic integration of ALC and ELC Indoor scene [50 Hz]: Automatic integration of ALC and ELC (up to 1/100 s) Indoor scene [60 Hz]: Automatic integration of ALC and ELC (up to 1/120 s) Fix shutter	
Shutter Speed	Fix shutter: 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 (only at Super Dynamic Off)	
Super Dynamic	On / Off	
Face Super Dynamic	On / Off (Only at Super Dynamic: ON)	
Adaptive Black Stretch	On / Off (Only at Super Dynamic: OFF)	
Fog compensation	On / Off	
AGC	On (Low, Mid, High) / Off  Off / Auto (May, 2y (2/20 a), /y (//20 a), /y (//20 a), 10y (10/20 a), 14y (14/20 a))	
Electronic Sensitivity UP Day & Night (IR)	Off / Auto (Max. 2x (2/30 s), 4x (4/30 s), 6x (6/30 s), 10x (10/30 s), 16x (16/30 s)]  Mode: Auto1 / Auto2 / Auto3 / On / Off	
Day & Might (IIV)	Level: High / Low, with external control	
Digital Noise Reduction	High / Low	
Video Motion Detection	4 areas Sensitivity: 15 steps Detection size: 10 steps	
Privacy Zone	Up to 8 zones / Up to 32 zones, gray / mosaic	
Image Stabilizer	On / Off	
VIQS	Up to 2 zones at preset position 1-8 and except preset	
Double Image Reduction	On/ Off	
Camera Title (OSD)	Up to 20 characters (alphanumeric characters, marks)	
Focus distance	Limited / Unlimited	
LENS		
Focal Length	4.3 mm -129.0 mm, 30x	
Zoom Ratio	30x / 90x with extra optical zoom (at 640x360)	
Digital (Electrical) Zoom	12x (Max. 1080x combined with extra optical zoom at 640x360)	
Angular Field of View	H: 2.6° [Tele] - 64.6° [Wide] V: 1.6° [Tele] - 38.2° [Wide]	
Maximum Aperture Ratio	1 : 1.6 (Wide) – 4.7 (Tele)	
Focusing Range	2.0 m - ∞	
Aperture Range	F1.6 - 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. 300°/s	
Tilting Range	-15° - 195° (µpward-level-downward) Auto Eyelid Mechanism (Double image reduction) Selectable titting angle: 0° / -5° / -10° / -15	
Tilting Speed	Selectable titting angle: $U^*/-5^\circ$ / $-10^\circ$ / $-15$ Manual: approx. $0.065^\circ$ /s $-120^\circ$ /s, Up to 256 steps (depending on the controller Preset: up to approx. $300^\circ$ /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 (256 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)	
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 SDXC/SDHC/SD memory card can be downloaded	
	Still or motion / images recorded in the SDXC/SDHC/SD memory card can be downloaded English / Italian / French / German / Spanish / Russian / Chinese / Japanese	
SD Memory Data Download GUI/Setup Menu Language System Log	English / Italian / French / German / Spanish / Russian / Chinese / Japanese  Up to 100 (Internal) Up to 4,000 (SDXC/SDHC/SD memory when the recording format is set to JPEG) error logs	
SD Memory Data Download GUI/Setup Menu Language	English / Italian / French / German / Spanish / Russian / Chinese / Japanese Up to 100 (Internal)	

NETWORK			
Network IF	10Base-T / 100Base-T	X, RJ-45 connector	
Image Resolution	Image Capture Mode: 2 mega pixel [16:9]	H.264: 1,920 x 1,080 / 640 x 360 / 320 x 180, up to 30 fps JPEG [MJPEG]: 1,920 x 1,080 / 640 x 360 / 320 x 180, up to 30 fps	
	Image Capture Mode:	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 fps	
	1.3 mega pixel [16:9] Image Capture Mode:	H.264: 1,280 x 960 / VGA [640 x 480] / QVGA [320 x 240], up to 30 fps JPEG [MJPEG]: 1,280 x 960 / VGA [640 x 480] / QVGA [320 x 240], up to 30 fps JPEG [MJPEG]: 1,280 x 960 / VGA [640 x 480] / QVGA [320 x 240], up to 30 fps	
11.0777	1.3 mega pixel [4:3] Transmission Mode		
H.2644	Frame Rate	Constant bitrate / Frame rate priority / Best effort /Advanced VBR  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/ 6,144/8,192/10,240/12,288/14,336 kbps	
	Image Quality	Low / Normal / Fine	
	Refresh Interval	0.2/0.25/0.33/0.5/1/2/3/4/5s	
100	Transmission Type	Unicast / Multicast	
JPG	Image Quality	10 steps	
	Refresh Interval	0.1 fps - 30 fps	
Andia Communica	Transmission Type	Pull / Push	
Audio Compression	G.726 (ADPCM) 32 kbps / 16 kbps, G.711 64 kbps for transmitting, AAC for audio recording and sound detection		
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, ICMP, ARP IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP		
FTP Client	Alarm image transmission, FTP periodic transmission (when the FTP transmission is failed, backup on an optional SDXC/SDHC/SD memory card is available)		
No. of Simultaneous Users	Up to 14 users (depends on network conditions)		
SDXC/SDHC/SD Memory Card (Option)	H.284 recording [Audio recording is enabled]: Manual REC / Alarm REC [Pre/Post] / Schedule REC JPEG recording: Manual REC / Alarm REC [Pre/Post] / Backup upon network failure compatible.		
	compatible SD [SDHC/SDXC] card: Panasonic 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB*, 64GB** model *SDHC card, ** SDXC card [except miniSD card and microSD card]		
Cellular Phone Compatibility	JPEG image		
Mobile Terminal Compatibility	iPad, iPhone, iPod touch		
ALARM			
Alarm Source	3 terminals input, VMD, command alarm, sound detection		
Alarm Actions	SDXC/SDHC/SD memory recording, E-mail notification, Indication on browser, FTP image transfer, Panasonic protocol output		
Alarm Log	With SDXC / SDHC / SD memory card: 5,000 logs, without SDXC / SDHC / SD memory card: 1,000 logs		
Schedule	Alarm / VMD / access permission / H.264 recording / sound detection		
INPUT/OUTPUT			
Monitor Output (for adjustment)	VBS : 1.0V[p-p] / 75 , NTSC / PAL composite, BNC Jack		
Microphone/Line Input	MIC IN and Line IN are selectable 3.5 mm steren mini jack		
	(monaural input) (Applicable microphone: Plug-in power type) Supply voltage: $2.5 \text{ V} \pm 0.5 \text{ V}$ Input impedance: approx. $2 \text{ k}\Omega$		
Audio Output	3.5 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		
PTZ Position Display			
GENERAL			
Safety/EMC Standard	Safety: UL [UL60950-1], C-UL (CAN/CSA C22.2 No.60950-1), CE, IEC60950-1 EMC: FCC Part15 Class A, ICES-003 Class A, EN55022 Class B, EN55024		
Power Source and Power Consumption	AC24 V : 3.5 A, 55 W PoE+ : 470 mA, 25 W (IEEE802.3at compliant) POE Injector (Io W) : 1.0 A, 50 W		
Ambient Operating Temperature	AC24 V and Tested PoE Injector (60 W) : -50 °C - +55 °C (-58 °F - 131 °F) * with limitations P0E+: -30 °C - +55 °C (-22 °F - 131 °F)		
Ambient Operating Humidity	Less than 90% (no condensation)		
Impact Protection	IEC 62262:2002 IK10 (Impact energy 20J)		
Water and Dust Resistance	IP66, IEC60529 measuring standard compatible		
Dimensions	9-1/32"W x 15-7/16"H Diameter of the dome: 6-5/16"		
Weight	Approx. 11.04 lbs		
Finish	Main body: Aluminum die cast, Natural silver Sunshields: ASA resin coating, Natural silver Dome section: Clear polycarbonate resin		

\*Converted value \*\*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\*\*. \*\*TriVlen using IPG for communication, use Microsoft\*\* Windows\*\* 8 or Microsoft\*\* Windows\*\* 7 or Microsoft\*\* Windows\*\* 7 or Microsoft\*\* Windows Vista\*\*. \*\*Iransmission for 2 streams can be individually set in the same compression method.