



360° DOME NETWORK CAMERA FOR USE WITH THE i-PRO TRANSIT SYSTEM

- Full HD 1080p images up to 30 fps
- 360° monitoring with a wide variety of transmission modes, including Double Panorama, Panorama, Quad PTZ and Single PTZ image modes
- Electronic PTZ operation to zoom in on areas of interest within any scene
- Built-in distortion correction function
- Super Dynamic and Adaptive Black Stretch technologies deliver 128x wider dynamic range compared to conventional cameras
- SDXC/SDHC/SD memory card slot for manual recording (H.264/JPEG), alarm recording (H.264/JPEG) and backup recording upon network failure (JPEG)
- Vandal-resistant design
- IP66-rated for water and dust resistance



SUPERIOR RELIABILITY AND 360° SURVEILLANCE FOR IMPROVED INDOOR/OUTDOOR APPLICATIONS.

The WV-SW458 is an IP66-rated weather and vandal-resistant 360° panoramic 3.0 megapixel dome network camera that is perfect for a wide variety of surveillance applications. Capturing Full HD 1080p images at 30 fps, the WV-SW458 features a wide variety of transmission modes and can be configured to meet your specific surveillance requirements. This high-quality yet affordable camera features a low-profile design and virtual pan/tilt/zoom operation that does not require a motor—enabling the camera to be placed in spaces where conventional PTZ cameras do not fit. With advanced internal distortion correction and Wide Dynamic Range (WDR), it provides wide-area surveillance images with exceptional clarity even in demanding lighting conditions.

360° Super Dynamic Vandal-resistant Dome Network Camera WV-SW458/WV-SW458M

CAMERA	
Image Sensor	1/3 type MOS image sensor
Effective Pixels	Approx. 3.1 megapixels
Scanning Mode	Progressive
Scanning Area	4.51 mm [H] x 3.38 mm [V] (3/16" [H] x 1/8" [V])
Minimum Illumination	Color: 1.5 lx [F2.4, Auto slow shutter: Off (1/30s), Gain: On (High)] Color: 0.1 lx [F2.4, Auto slow shutter: Max. 16/30s, Gain: On (High)] BW: 1.2 lx [F2.4, Auto slow shutter: Off (1/30s), Gain: On (High)] BW: 0.08 lx [F2.4, Auto slow shutter: Off (1/6/30s), Gain: On (High)] ¹⁾
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] / ELC
Shutter Speed	With Super Dynamic On: ELC [1/30s] With Super Dynamic Off: ELC [1/30s], ELC [3/100s], ELC [3/120s], ELC [2/100s], ELC [2/120s], ELC [1/100s], ELC [1/120s], ELC [1/250s], ELC [1/500s], ELC [1/1,000s], ELC [1/2,000s], ELC [1/4,000s], ELC [1/10,000s]
Super Dynamic	ON / OFF
Dynamic Range	52 dB typ. [only at Super Dynamic On]
Adaptive Black Stretch	On/Off [only at Super Dynamic Off]
AGC	ON [HIGH] / ON [MID] / ON [LOW] / OFF
Electronic Sensitivity UP	OFF [1/30 s], Max. 2/30 s, Max. 4/30 s, Max. 6/30 s, Max. 10/30 s, Max. 16/30 s
Day & Night [Electrical]	OFF / AUTO
Digital Noise Reduction	HIGH / LOW
Video Motion Detection	ON / OFF, 4 areas available
Video Analytics Face Detection	Off/On/On with face frame display. However, face detection is not supported when "Fisheye" or "Quad streams" is selected for the image type.
Auto Mode	Auto pan/ Preset sequence Auto mode can only be used when the image type is Quad PTZ or Single PTZ.
Self Return	10 s / 20 s / 30 s / 1 min / 2 min / 3 min / 5 min / 10 min / 20 min / 30 min / 60 min Self return can only be used when the image type is Quad PTZ or Single PTZ.
Privacy Zone	ON / OFF [up to 4 zones available]
VIOS	On/Off [up to 2 areas available] However, the VIOS function is not supported when "Quad PTZ", "Single PTZ" or "Quad streams" are selected.
Camera Title [OSD]	Up to 20 characters [alphanumeric characters, marks], On/Off. However, you can specify characters to be displayed on each of the 4 screens when "Quad streams" is selected.

LENS	
Focal Length	0.837 mm
Angular Field of View	Horizontal: 182°, Vertical: 176°
Maximum Aperture Ratio	1:2.4 [Fixed]
Focusing Range	0.3 m - ∞

BROWSER GUI	
Camera Control	Pan/Tilt/Digital Zoom, Preset, Auto Mode, Self Return, Fisheye Control, Brightness, AUX ON / OFF
Display Mode	Spot, Quad: Images from 16 cameras can be displayed in 4 different Quad screens or 16 split screens [JPEG only]. 20-character camera title available.
Digital Zoom	1x, 2x, 4x controlled by browser GUI [Quad PTZ or Single PTZ mode] 1x-4x [Panorama, Double Panorama, 3M Fisheye mode]
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.
GUI/Setup Menu Language	English, Italian, French, German, Spanish, Russian, Chinese, Japanese
System Log	Up to 100 [Internal], Up to 4,000 [SDXC/SDHC/SD memory when the recording format is set to JPEG] error logs
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-SW458 10Base-T / 100Base-TX, RJ-45 connector [female] WV-SW458M 10Base-T / 100Base-TX, M12 connector [male]
Image Resolution ⁴	2M Panorama [16:9]/2M Double Panorama [16:9]: H.264[1]: 1920x1080 / 640x360 / 320x180, up to 30 fps H.264[2]: 640x360/320x180, up to 30 fps JPEG: 1920x1080/640x360/320x180, up to 30 fps 1.3M Panorama [16:9]/1.3M Double Panorama [16:9]: H.264[1]: 1280x720 / 640x360 / 320x180, up to 30 fps H.264[2]: 640x360/320x180, up to 30 fps JPEG: 1280x720/640x360/320x180, up to 30 fps Panorama + Quad PTZ/ Panorama + Single PTZ/Double Panorama + Quad PTZ/ Double Panorama + Single PTZ: When using distribution of "Well Panorama" or "Double panorama" H.264[1]: 1920x1080/640x360/320x180, up to 15 fps JPEG: 1920x1080/640x360/320x180, up to 15 fps When using distribution of "Quad PTZ" or "Single PTZ" H.264[2]: 1280x960/640x480/320x240, up to 15 fps JPEG: 1280x960/640x480/320x240, up to 15 fps VGA Quad streams Ch1-Ch4 640x480 Max. 30 fps * Only for H.264 images * There are specification limitations, such as the SD memory card function being unavailable
H.264	3M Fisheye [4:3]: H.264[1]: 1280x960, up to 15 fps; JPEG: 2048x1536, up to 15 fps Transmission Mode Constant bit rate / Best effort 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 / 10,240 / 12,288 / 14,336 kbps Image Quality LOW / NORMAL / FINE Refresh Interval 1 fps to 30 fps Transmission Type UNICAST / MULTICAST

NETWORK (CONT.)		
JPEG	Image Quality	10 steps
	Refresh Interval	0.1 fps to 30 fps
	Transmission Type	PULL / PUSH
Audio Compression	6.726 [ADPCM] 32 kbps / 16 kbps, 6.711 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	Pv6: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, MLD, ICMP, ARP IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, 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 SD memory card is available.]	
No. of Simultaneous Users	Up to 14 users [Depends on network conditions]	
SDXC/SDHC/SD Memory Card (Option)	Manufactured by Panasonic SDXC memory card: 64 GB / SDHC memory card: 4 GB, 8 GB, 16 GB, 32 GB / SD memory card: 1 GB, 2 GB [except miniSD card and microSD card]	
Face Detection	ON / OFF [with XML notification] * "3M Fisheye [4:3]", "1.3M Fisheye [4:3]" and "VGA Quad streams" modes cannot use the Face Detection function.	
Cellular Phone Compatibility	JPEG image, AUX control [by access level]	
Mobile Terminal Compatibility	iPad, iPhone, iPod touch [iOS 4.2.1 or later] Android™ mobile terminals	

ALARM	
Alarm Source	VMD, Command alarm
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	VMD

INPUT/OUTPUT	
Microphone/Line Input	3.5 mm monaural mini jack, Input impedance: Approx. 2 kΩ For Microphone Input Applicable microphone: Plug-in power type, Supply voltage: 2.5 V ±0.5 V For Line Input Input level: Approx. -10 dBV
Audio Output	3.5 mm stereo mini jack [monaural output], Output impedance: Approx. 600 Ω, Line level
External I/O Terminals	ALARM IN 1, ALARM IN 2/ ALARM OUT, ALARM IN 3/ AUX OUT [x1 for each]

GENERAL	
Mounting Method	Ceiling/ Wall
Safety/EMC Standard	UL [UL60950-1], FCC [Part 15 Class A], C-UL [CAN/CSA C22.2 No.60950-1], DOC [ICES003 Class A] SW458M: CE, IEC60950-1 [EN55022 Class A, EN55024] SW458: CE, IEC60950-1 [EN55022 Class B, EN55024]
Power Source and Power Consumption	12V DC, PoE [IEEE802.3af compliant] / 12 V DC*: 540 mA/ 6.5 W / PoE 48 V: 125 mA/ 6.0 W [Class 2 devices] *FOR UL LISTED MODEL(S), ONLY CONNECT 12 V DC CLASS 2 POWER SUPPLY.
Ambient Operating Temperature	-40°C to +50°C [-40°F to 122°F]
Ambient Operating Humidity	Less than 90% [no condensation]
Water and Dust Resistance	Camera: IP66 [IEC60529] ⁵⁾
Shock Resistance	Compliant with 50 J [IEC 60068-2-75]/IK10 [IEC 62262]
Railway Application	EN50155, EN50121
Dimensions	WV-SW458 Main body: 154 mm x 50.5 mm [H] [6-1/16" x 2" [H]] Including the mounting bracket: 164 mm x 88 mm [H] [6-15/32" x 3-15/32" [H]] 191.5 mm [W] [7-17/32" [W]] [including projection of the base cover fixing screw] WV-SW458M 154 mm x 50.5 mm [H] [6-1/16" x 2" [H]]
Mass [Approx.]	WV-SW458 Approx. 1.1 kg [2.43 lbs.] [including the camera attachment and the mounting bracket] WV-SW458M Approx. 0.8 kg [1.76 lbs.] [including the camera attachment]
Finish	Main body: Aluminum die cast, light gray Dome section: Clear polycarbonate resin

¹ 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
* When the camera is faced toward spotlight or other bright lights and light-reflecting objects, ghost may appear

