

## iA H.265 360-degree Vandal Resistant Outdoor Dome Camera

Panasonic WV-S4550L / WV-S4550LM captures the highest quality images in even very challenging and dynamic environments. In particular, the image of the person's face or object at the edge of the fisheye is clear with less distortion.

Intelligent Auto (iA) monitors scene dynamics and motion to adjust key camera settings automatically in real-time reducing distortion such as motion blur on moving objects. Adopting H.265 Smart Coding technology, bandwidth efficiency is intelligently increased for longer recording and less storage. Out of the box, the camera supports full data encryption streaming and is compliant to FIPS 140-2 Level 1 standards to keep your video secured.

### Extreme image quality for evidence capturing under challenging conditions

- Clear and less distorted image of the person's face and objects at the edge of the fisheye
- Instant response to sudden light changes like tunnel entry and exit
- Auto Shutter speed control for fast moving objects
- Super Dynamic 108dB for backlit situations and shadows on night streets
- Built-in IR LED to produce a clear monochrome image in zero lux conditions with 10 m (33 feet) irradiation distance
- Environmental durability : EN50155, IP66, IK10, 50J compliant and Dehumidification device

### Extreme H.265 compression with new Smart Coding

- Longer recording and less storage space compared to any H.264 based compression techniques
- New self-learning ROI\* encoding (Auto VIQS) dynamically detects motion areas to keep vehicles and humans in good picture quality while lowering your bandwidth \* Region of Interest

### Extreme Data Security

- Full encryption SD card edge recording to keep your data safe
- FIPS 140-2 Level 1 compliant
- Full end-to-end system encryption with supported VMS and devices to protect from IP snooping/spoofing and detect data alteration

### Complete with powerful analytics built-in\*

- Heat map : Visualization of people's traffic pattern and staying times
- People Counting : Statistics data on the number of people entering and leaving a specific zone
- MOR (Moving Object Remover) : Monitoring of only the surrounding environment by removing people and other moving objects from video \*To enable analytics, please add the optional WV-SAE200 software.

### Key Features

- 5 Megapixel images up to 30 fps
- iA (intelligent Auto)
- Super Dynamic 108dB
- H.265 Smart Coding
- IP66, IK10, 50J compliant, Dehumidification device

### Applications

- Retail / Bank
- Education / Hospital
- Building
- Transportation (Airport / Train, Subway station)
- Logistics



# Specifications

<b>Camera</b>	Image Sensor	Approx. 1/3 type MOS image sensor
	Minimum Illumination	Color : 0.3 lx, BW : 0.04 lx (F2.4, Maximum shutter : Off (1/30 s), AGC : 11) BW : 0 lx (F2.4, Maximum shutter : Off (1/30 s), AGC : 11, when the IR LED is lit) Color : 0.02 lx, BW : 0.0025 lx (F2.4, Maximum shutter : Max. 16/30s, AGC : 11) *1
	Intelligent Auto	On / Off
	Maximum shutter	Max.16/30s to Max. 1/10000s
	Super Dynamic	On / Off, the level can be set in the range of 0 to 31.
	Dynamic Range	108 dB (Super Dynamic : On, level : 31)
	Image Settings	Gain (AGC), White balance
	Image Compensation	Adaptive black stretch, Back light compensation (BLC), Fog compensation, High light compensation (HLC), Digital noise reduction
	Color/BW (ICR)	Off / On (IR Light Off) / On (IR Light On) / Auto1 (IR Light Off) / Auto2 (IR Light On) / Auto3 (SCC)
	IR LED	High* / Middle / Low / Off *Maximum irradiation distance : 10 m (Approx. 33 ft) (Mounting height : Approx. 3 m, Peripheral intensity control : On)
	Video Motion Detection (VMD)	On / Off, 4 areas available
	Intelligent VMD (i-VMD)*2	Type 5* optional plug-in software WV-SAE200
	Privacy Zone	On / Off (up to 8 zones available)
	Camera Title (OSD)	On / Off Up to 20 characters (alphanumeric characters, marks)
Fixing angle adjustment	-5°, 0°, +5°	
<b>Lens</b>	Zoom Ratio	1x
	Digital (electronic) zoom	Choose from 3 levels of x1, x2, x4
	Focal length	0.84 mm {1/32 inches}
	Maximum Aperture Ratio	1 : 2.4
	Focus range	0.3 m {11-13/16 inches} - ∞
	Angular Field of view	Horizontal : 186° Vertical : 186°
<b>Browser GUI</b>	Camera Control	Brightness, AUX On / Off
	Audio	Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High Audio Output : On / Off Volume adjustment : Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese
<b>Network</b>	Network IF	WV-S4550L : 10Base-T / 100Base-TX, RJ45 connector WV-S4550LM : 10Base-T / 100Base-TX, M12 connector
	Resolution	<Ceiling> •Fisheye mode max.30 fps 2192x2192 / 1280x1280 / 640x640 / 320x320 <Wall> •Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600x1200 / 1280x960 / 800x600 / VGA / QVGA
		<Ceiling> •Double Panorama mode (max. 30 fps) 1920x1080 / 1280x720 / 640x360 / 320x180 •Fisheye + Double Panorama mode (max. 30 fps) (Fisheye) 2192x2192 / 1280x1280 / 640x640 / 320x320 (Double Panorama) 1280x720 / 640x360 / 320x180 •Fisheye + Quad PTZ mode (max. 30 fps) (Fisheye) 2192x2192 / 1280x1280 / 640x640 / 320x320 (Quad PTZ) 1280x960 / 800x600 / VGA / QVGA •Quad streams mode (Single PTZ (Quad streams)) 1280x960 / 800x600 / VGA / QVGA (max. 30 fps) (Quad PTZ) 1600x1200 / 1280x960 / 800x600 / VGA / QVGA (max. 5 fps)
		<Wall> •Panorama mode (max. 30 fps) 1920x1080 / 1280x720 / 640x360 / 320x180 •Fisheye + Panorama mode (max. 30 fps) (Fisheye) 2192x2192 / 1280x1280 / 640x640 / 320x320 (Panorama) 1280x720 / 640x360 / 320x180

\*1 Converted value

\*2 Auto VIQS, i-VMD, can not be used at the same time.

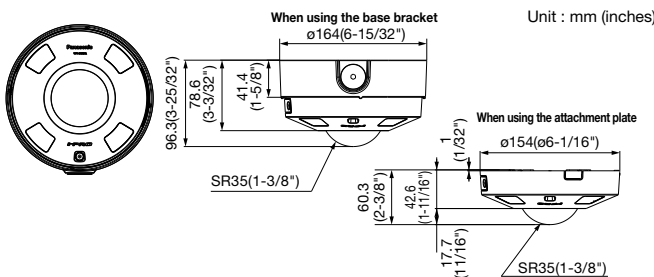
\*3 Transmission for 2 streams can be individually set.

\*4 Only use AAC-LC (Advanced Audio Coding - Low Complexity) when recording audio on an SD memory card.

<b>Network</b>	H.265/	Transmission Mode	Constant bit rate / VBR / Frame rate / Best effort
	H.264 <sup>3</sup>	Transmission Type	Unicast / Multicast
Smart Coding	JPEG	Image Quality	10 steps
	<b>GOP (Group of pictures) control :</b> On (Frame rate control) / On (Advanced)* / On (Low) / On (Mid) / Off *On (Frame rate control) and On (Advanced) are only available with H.265. <b>Auto VIQS : On / Off</b>		
Audio Compression	G.726 (ADPCM) : 16 kbps / 32 kbps, G.711 : 64 kbps, AAC-LC <sup>4</sup> : 64 kbps / 96 kbps / 128 kbps		
Supported Protocol	IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, RTP, MLD, ICMP, ARP, IEEE 802.1X, DiffServ IPv4 : TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTSP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ		
Maximum concurrent access number	Up to 14 users (Depends on network conditions)		
SDXC/SDHC/SD	H.265 / H.264 recording :		
Memory Card (Option)	Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure JPEG recording : Manual REC / Alarm REC (Pre/Post) / Backup upon network failure Compatible SDXC/SDHC/SD card : Panasonic 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB*, 64 GB**, 128 GB**, 256 GB** model *SDHC card, **SDXC card (except miniSD card and microSD card)		
Mobile Terminal Compatibility	iPad, iPhone (iOS 4.2.1 or later), Android™ mobile terminals		
<b>Alarm</b>	Alarm Source	3 terminals input, VMD, Command alarm	
	Alarm Actions	SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, FTP image transfer, Panasonic alarm protocol output	
<b>Input/ Output</b>	Audio Input	ø3.5 mm stereo mini jack, Recommended applicable microphone : Plug-in power type (Sensitivity of microphone : -48 dB ±3 dB (0 dB=1 V / Pa, 1 kHz)) Input impedance : Approx. 2 kΩ (unbalanced) Supply voltage : 2.5 V ±0.5 V	
	Audio Output <sup>5</sup>	ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 Ω (unbalanced) Output level : -20 dBV	
	External I/O Terminals	ALARM IN 1 (Black & white input, Auto time adjustment) (x1), ALARM IN 2 (ALARM OUT) (xt), ALARM IN 3 (AUX OUT) (xt)	
<b>General</b>	Safety	UL (UL60950-1), c-UL (CSA C22.2 No.60950-1), CE, IEC60950-1	
	EMC	FCC (Part15 ClassA), ICES003 ClassA, EN55032 ClassB, EN55024	
	Power Source and Power Consumption	DC power supply : DC12 V 910 mA, Approx. 10.9 W PoE (IEEE802.3af compliant) Device : DC48 V 240 mA, Approx. 11.5 W (Class 0 device)	
	Ambient Operating Temperature	IR LED : On -40 °C to +50 °C (-40 °F to 122 °F) IR LED : Off -40 °C to +60 °C (-40 °F to 140 °F)	
	Ambient Operating Humidity	10% to 100 % (no condensation)	
	Water and Dust Resistance	IP66(IEC60529), Type 4X(UL50), NEMA 4X compliant	
	Shock Resistance	50J (IEC 60068-2-75 compliant), IK10 (IEC 62262)	
	Railway Application	EN50155, EN45545(WV-S4550LM only)	
	Dimensions	<b>When using the attachment plate :</b> ø154 mm × 60.3 mm (H) (ø6-1/16 inches × 2-3/8 inches (H)) Dome radius 35 mm {1-3/8 inches} <b>When using the base bracket &lt;WV-S4550L&gt; :</b> ø164 mm × 96.3 mm (H) {ø6-15/32 inches × 3-25/32 inches (H)} Dome radius 35 mm {1-3/8 inches}	
	Mass (approx.)	<b>When using the attachment plate :</b> Approx. 870 g {1.92 lbs} <b>When using the base bracket &lt;WV-S4550L&gt; :</b> Approx. 1.3 kg {2.87 lbs}	
Finish	<b>Main body :</b> Aluminum die cast, Light gray <b>Outer fixing screws :</b> Stainless steel <b>Dome section :</b> Polycarbonate resin, Clear		

\*5 The audio output can be switched to the monitor output. Refer to the Operating Instructions on the provided CD-ROM for descriptions of how to switch the output. factory shipment : NTSC monitor)

## Appearance



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### Important

- Safety Precaution : Carefully read the Important Information, Installation Guide and operating instructions before using this product.
- Panasonic cannot be responsible for the performance of the network and/or other manufacturers' products used on the network.

• Masses and dimensions are approximate. • Specifications are subject to change without notice.

## Optional Accessories

<b>Ceiling Mount Bracket</b> <b>WV-Q121B</b>	<b>Wall Mount Bracket</b> <b>WV-Q185</b> (Light gray) <b>WV-Q122A</b> (Fine silver)	<b>Mount Bracket</b> <b>WV-Q186</b> (Light gray) <b>WV-Q124</b> (Fine silver)	<b>Pole Mount Bracket</b> <b>WV-Q182</b> (Light gray) <b>WV-Q188</b> (Fine silver)	<b>Corner Mount Bracket</b> <b>WV-Q183</b> (Light gray) <b>WV-Q189</b> (Fine silver)
(This bracket requires WV-Q186 or WV-Q124.)	(This bracket requires WV-Q186 or WV-Q124.)	(This bracket requires WV-Q185 or WV-Q122A or WV-Q121B.)	(This bracket requires WV-Q185 or WV-Q122A.)	(This bracket requires WV-Q185 or WV-Q122A.)

### Plug-in Software for i-VMD

#### WV-SAE200

i-VMD is possible to detect objects in the specified area by advanced video analysis technology.

- i-VMD : People Counting, Heat-map,  
MOR (Moving Object Remover),  
Intruder Detection, Loitering Detection,  
Cross line Detection, Object Detection, Scene change Detection



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(2A-201CL)