Panasonic

WV-S4550LM

BUSINESS

5MP In-vehicle 360-degree Fisheye Network Camera

Panasonic 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. By adopting H.265 Smart Coding technology, bandwidth efficiency is intelligently increased for longer recording and less storage. Cameras out-of-the-box, use an encryption module standardized by FIPS Publication 140-2 for secure video streaming.

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 vehicles
- 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 bandwidth compression with new Panasonic H.265 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
- $\hbox{- FIPS140-2 CAVP compliant *Using encryption module standardized by FIPS publication 140-2}\\$
- 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

Key Features

- 5-megapixel fisheye images up to 30fps
- iA (intelligent Auto)
- Super Dynamic 108dB
- H.265 Smart Coding
- IP66, IK10, 50J compliant, Dehumidification device
- i-VMD License Bundled
- Onvif Profile G / S / T





with Base Bracket

Industry examples

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



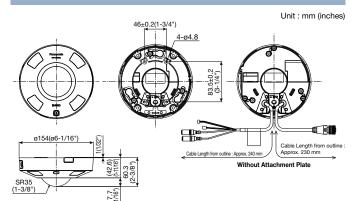
Specifications

Camera	Image Sensor	Approx. 1/3 type MOS image sensor
	Minimum Illumination	Color : 0.3 lx, BW : 0.04 lx
	William Marinia Con	(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	Max.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) /
	ID LED L. L.	Auto2 (IR Light On) / Auto3 (SCC)
	IR LED Light	High* / Middle / Low / Off *Maximum irradiation distance : 10 m (Approx. 33 ft)
	Video Motion Detection (VMD)	(Mounting height : Approx. 3 m, Peripheral intensity control : On)
	Intelligent VMD (i-VMD)*2	On / Off, 4 areas available Type 5 *Bundled License
	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°
Lens	Zoom Ratio	1x
Lens	Digital (electronic) zoom	Choose from 3 levels of x1, x2, x4
1	Focal length	0.84 mm {1/32 inches}
	Maximum Aperture Ratio	1:2.4
i	Focus range	0.3 m {11-13/16 inches} - ∞
	Angular Field of view	Horizontal: 186° Vertical: 186°
Browser	Camera Control	Brightness, AUX On / Off
GUI	Audio	Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High
		Audio Output : On / Off Volume adjustment : Low / Middle / High
	GUI / Setup Menu Language	English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese
Network		10Base-T / 100Base-TX, M12 connector
	Resolution <ceiling></ceiling>	•Fisheye mode max.30 fps
	<wall></wall>	
	<vvaii></vvaii>	2192×2192 / 1280×1280 / 640×640 / 320×320
	<vvaii></vvaii>	•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps
	<vvaii></vvaii>	•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600×1200 / 1280×960 / 800×600 / VGA / QVGA
	<vvaii></vvaii>	•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600×1200 / 1280×960 / 800×600 / VGA / QVGA •Double Panorama mode (max. 30 fps)
		•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600x1200 / 1280x960 / 800x600 / VGA / OVGA •Double Panorama mode (max. 30 fps) 1920x1080 / 1280x720 / 640x360 / 320x180
		•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600x1200 / 1280x960 / 800x600 / VGA / QVGA •Double Panorama mode (max. 30 fps) 1920x1080 / 1280x720 / 640x360 / 320x180 •Fisheye + Double Panorama mode (max. 30 fps)
		•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600×1200 / 1280×960 / 800×600 / VGA / QVGA •Double Panorama mode (max. 30 fps) 1920×1080 / 1280×720 / 640×360 / 320×180 •Fisheye + Double Panorama mode (max. 30 fps) (Fisheye) 2192×2192 / 1280×1280 / 640×640 / 320×320
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		•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600x1200 / 1280x960 / 800x600 / VGA / QVGA •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
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		•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600x1200 / 1280x960 / 800x600 / VGA / QVGA •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)
	<ceiling></ceiling>	•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600x1200 / 1280x960 / 800x600 / VGA / QVGA •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. 30 fps) (Quad PTZ) 1600x1200 / 1280x960 / 800x600 / VGA / QVGA (max. 30 fps) (Quad PTZ) 1600x1200 / 1280x960 / 800x600 / VGA / QVGA (max. 50 fps)
		•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600x1200 / 1280x960 / 800x600 / VGA / QVGA •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. 50 fps) •Panorama mode (max. 30 fps)
	<ceiling></ceiling>	•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600x1200 / 1280x960 / 800x600 / VGA / QVGA •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 / 640x380 / 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) 1920x1080 / 1280x720 / 640x360 / 320x180
	<ceiling></ceiling>	•Quad PTZ mode max.30 fps, Single PTZ mode max.30 fps 1600x1200 / 1280x960 / 800x600 / VGA / QVGA •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) •Panorama mode (max. 30 fps) 1920x1080 / 1280x720 / 640x360 / 320x180 •Fisheye + Panorama mode (max. 30 fps)
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Network	Smart Coding	GOP (Group of pictures) control :
		On (Frame rate control)* / On (Advanced)* / On (Mid) / On (Low) / Off
		*On (Frame rate control) and On (Advanced) are only available with H.265
		Auto VIQS: On / Off
	Audio Compression	G.726 (ADPCM): 16 kbps / 32 kbps, G.711: 64 kbps,
	·	AAC-LC*4 : 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, RTP/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 /
	welliory card (Option)	Backup upon network failure
		JPEG recording: Manual REC / Alarm REC (Pre/Post) / Backup upon network failu
		Compatible SDXC/SDHC/SD card :
		Panasonic 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB*, 64 GB**, 128 GB**, 256 GB**mod
		*SDHC card, ** SDXC card (except miniSD card and microSD card)
	Mobile Terminal Compatibility	iPad, iPhone (iOS 4.2.1 or later), Android™ terminals
	ONVIF Profile	G/S/T
Alarm	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
Input/	Audio Input	ø3.5 mm stereo mini jack, Recommended applicable microphone : Plug-in power type
Output		(Sensitivity of microphone : -48 dB ±3 dB (0 dB=1 V / Pa,1 kHz))
		Input impedance : Approx. 2 k Ω (unbalanced) Supply voltage : 2.5 V ± 0.5
	Audio Output*5	ø3.5 mm stereo mini jack (monaural output)
		Output impedance : Approx. 600 Ω (unbalanced) Output level : -20 dB
	External I/O Terminals	ALARM IN 1 (Black & white input, Auto time adjustment) (x1),
		ALARM IN 2 (ALARM OUT) (x1), ALARM IN 3 (AUX OUT) (x1)
General	Safety	UL (UL60950-1), c-UL (CSA C22.2 No.60950-1), CE, IEC60950-1
	EMC	FCC (Part15 ClassA), ICES003 ClassA, EN55032 ClassB, EN55024
		ECE-R10, EN50498 compliant, EN50121
	Power Source and	DC power supply : DC12 V 910 mA, Approx. 10.9 W
	Power Consumption	PoE (IEEE802.3af compliant) Device : DC48 V 240 mA, Approx. 11.5 W (Class 0 device)
	Ambient Operating	IR LED : On -40 °C to +50 °C (-40 °F to 122 °F)
	Temperature	IR LED : Off -40 °C to +60 °C (-40 °F to 140 °F)
	Ambient Operating Humidity	10% to 100 % (no condensation)
	Dehumidification Device	Rosahl element
	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	EN45545 compliant, EN50155-TX
	Dimensions	When using the attachment plate :
		ø154 mm × 60.3 mm (H) {ø6-1/16 inches × 2-3/8 inches (H)}
		Dome radius 35 mm {1-3/8 inches}
	Mass (approx.)	When using the attachment plate : Approx. 870 g {1.92 lbs}
	Finish	Main body: Aluminum die cast, Light gray
		Outer fixing screws : Stainless steel
		Cato. Ining Co. 640 . Otalilicos steel

- *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.
- 3 Hairsinssinson for 2 streams can be instructing set.
 4 When recording audio on an SD memory card, only use AAC-LC (Advanced Audio Coding Low Complexity).
 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



Bundled License

Plug-in Software for i-VMD

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



Important

- Safety Precautions: Carefully read the Basic Information, Installation Guide and Operating Instructions before using this product.
- Panasonic i-PRO Sensing Solutions Co., Ltd. cannot be held responsible for the performance of the network and/or other manufacturers' products used on the network.

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