





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

Panasonic WV-X4571L / WV-X4571LM 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**

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

#### **Applications**

- Transportation (Airport / Train, Subway station)
- Logistics / Factory
- Education / Hospital

- Retail / Bank
- Building



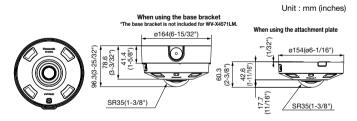


#### Specifications

	Image Sensor	Approx. 1/2 type MOS image sensor
Camera	Minimum Illumination	Color : 0.3 lx, BW : 0.04 lx
		(F1.9, Maximum shutter : Off (1/30 s), AGC : 11)
		BW:0 lx
		(F1.9, Maximum shutter : Off (1/30 s), AGC : 11, when the IR LED is lit)
		Color: 0.02 lx, BW: 0.003 lx
		(F1.9, Maximum shutter : Max. 16/30s, AGC : 11) *1
	Intelligent Acts	
	Intelligent Auto	On / Off
	Maximum shutter	Max.16/30s to Max. 1/10000s
	Super Dynamic*2	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)*3	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°
Lens	Zoom Ratio	1x
	Digital (electronic) zoom	Choose from 3 levels of x1, x2, x4
	Focal length	1.4 mm {1/16 inches}
	Maximum Aperture Ratio	1:1.9
	Focus range	0.5 m {19-11/16 inches} - ∞
	Angular Field of view	Horizontal: 183° Vertical: 183°
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 /	English, Italian, French, German, Spanish, Portuguese, Russian,
	Setup Menu Language	Chinese, Japanese
Network		WV-X4571L : 10Base-T / 100Base-TX, RJ45 connector
	THE CONTRACT OF THE CONTRACT O	WV-X4571LM: 10Base-T / 100Base-TX, M12 connector
	Resolution <ceiling></ceiling>	•Fisheye mode (max.30 fps)
	<wall></wall>	2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320
	<vvaii></vvaii>	2992 2992 / 2192 2192 / 1200 21200 / 040 2040 / 320 2320
		•Ouad DT7 made (may 15 fpc) Single DT7 made (may 15 fpc)
		•Quad PTZ mode (max.15 fps), Single PTZ mode (max.15 fps)
	0	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA •Double Panorama mode (max. 15 fps)
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA •Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA **Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180 **Fisheye + Double Panorama mode (max. 15 fps)
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA  *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180  *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA  *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180  *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Double Panorama) 1280×720 / 640×360 / 320×180
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA  *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180  *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA  *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180  *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Double Panorama) 1280×720 / 640×360 / 320×180
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA  *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180  *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Double Panorama) 1280×720 / 640×360 / 320×180  *Fisheye + Quad PTZ mode (max. 15 fps)
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180 *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Double Panorama) 1280×720 / 640×360 / 320×180 *Fisheye + Quad PTZ mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA  *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180  *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Double Panorama) 1280×720 / 640×360 / 320×180  *Fisheye + Quad PTZ mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Quad PTZ) 1280×960 / 800×600 / VGA / QVGA  *Quad streams mode
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA  *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180  *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Double Panorama) 1280×720 / 640×360 / 320×180  *Fisheye + Quad PTZ mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Quad PTZ) 1280×960 / 800×600 / VGA / QVGA  *Quad streams mode (Single PTZ (Quad streams)) 1280×960 / 800×600 / VGA / QVGA (max. 15 fps)
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA  *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180  *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Double Panorama) 1280×720 / 640×360 / 320×180  *Fisheye + Quad PTZ mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Quad PTZ) 1280×960 / 800×600 / VGA / QVGA  *Quad streams mode (Single PTZ (Quad streams)) 1280×960 / 800×600 / VGA / QVGA (max. 15 fps) (Quad PTZ) 2560×1920 / 2048×1536 / 1600×1200 / 1280×960 /
		2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA  *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180  *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Double Panorama) 1280×720 / 640×360 / 320×180  *Fisheye + Quad PTZ mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Quad PTZ) 1280×960 / 800×600 / VGA / QVGA  *Quad streams mode (Single PTZ (Quad streams)) 1280×960 / 800×600 / VGA / QVGA (max. 15 fps) (Quad PTZ) 2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA (max. 5 fps)
	<ceiling></ceiling>	2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA  *Double Panorama mode (max. 15 fps) 2560×1440 / 1920×1080 / 1280×720 / 640×360 / 320×180  *Fisheye + Double Panorama mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Double Panorama) 1280×720 / 640×360 / 320×180  *Fisheye + Quad PTZ mode (max. 15 fps) (Fisheye) 2992×2992 / 2192×2192 / 1280×1280 / 640×640 / 320×320 (Quad PTZ) 1280×960 / 800×600 / VGA / QVGA  *Quad streams mode (Single PTZ (Quad streams)) 1280×960 / 800×600 / VGA / QVGA (max. 15 fps) (Quad PTZ) 2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA (max. 15 fps)  *Panorama mode (max. 15 fps)
		2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA    *Double Panorama mode (max. 15 fps)    *Fisheye + Double Panorama mode (max. 15 fps)    *Fisheye + Duad PTZ mode (max. 15 fps)    *Fisheye + Quad PTZ mode (max. 15 fps)    *Gisheye + Quad PTZ mode (max. 15 fps)    *Quad PTZ   1280×980 / 800×600 / VGA / QVGA    *Quad Streams mode    *Quad PTZ   2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA    *B00×600 / VGA / QVGA (max. 5 fps)    *Panorama mode (max. 15 fps)    *Panorama mode (max. 15 fps)
		2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA    **Double Panorama mode (max. 15 fps)    **Sisheye + Double Panorama mode (max. 15 fps)    **Fisheye + Quad PTZ mode (max. 15 fps)    **Guad PTZ   1280×360 / 800×600 / VGA / QVGA    **Quad Streams mode    **Guad PTZ   CQuad streams)   1280×960 / 800×600 / VGA / QVGA (max. 15 fps)    **Quad PTZ   2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA (max. 15 fps)    **Panorama mode (max. 15 fps)    **Fisheye + Panorama mode (max. 15 fps)
		2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA    *Double Panorama mode (max. 15 fps)    *Fisheye + Double Panorama mode (max. 15 fps)    *Fisheye + Duad PTZ mode (max. 15 fps)    *Fisheye + Quad PTZ mode (max. 15 fps)    *Gisheye + Quad PTZ mode (max. 15 fps)    *Quad PTZ   1280×980 / 800×600 / VGA / QVGA    *Quad Streams mode    *Quad PTZ   2560×1920 / 2048×1536 / 1600×1200 / 1280×960 / 800×600 / VGA / QVGA    *B00×600 / VGA / QVGA (max. 5 fps)    *Panorama mode (max. 15 fps)    *Panorama mode (max. 15 fps)

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

# **Appearance**



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- 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.

H.265/ Transmission Mode | Constant bit rate / VBB / Frame rate / Best effort H.264\*4 Transmission Type Unicast / Multicast JPEG Image Quality Smart Coding GOP (Group of pictures) control: On (Frame rate control)\* / On (Advanced)\* / On (Low) / On (Mid) / 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 : 64 kbps / 96 kbps / 128 kbps IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, FTP, SMTP, DNS, NTP, Supported Protocol 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 Up to 14 users (Depends on network conditions) H.265 / H.264 recording SDXC/SDHC/SD Manual REC / Alarm REC (Pre/Post) / Schedule REC / Memory Card (Option) Backup upon network failure IPEG 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\*\*mode \*SDHC card, \*\* SDXC card (except miniSD card and microSD card) Mobile Terminal Compatibility iPad, iPhone, Android™ mobile terminals Alarm Alarm Source 3 terminals input, VMD, Command alarm SDXC/SDHC/SD memory recording, E-mail notification, Alarm Actions HTTP alarm notification, Indication on browser, FTP image transfer, Panasonic alarm protocol output Monitor output VBS: 1.0 V [p-p] / 75 Ω, composite, ø3.5 mm mini jack Input/ (for adjustment) Output An NTSC or PAL signal can be outputted from camera Audio Input For microphone 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 k $\Omega$  (unbalanced) Supply voltage : 2.5 V ±0.5 V For line Input level: Approx. -10 dBV Audio Output\*6 ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600  $\Omega$  (unbalanced) Output level : –20 dBV External I/O Terminals ALARM IN1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN2 (Alarm input 2/ ALARM OUT) (x1) ALARM IN3 (Alarm input 3/ AUX OUT) (x1) UL (UL60950-1), c-UL (CSA C22.2 No.60950-1), CE, IEC60950-1 Safety CC (Part15 ClassA), ICES003 ClassA, EN55032 ClassB, EN55024 Power Source and DC power supply: DC 12 V 1.04A/Approx. 12.5 W PoE (IEEE802.3af compliant) Device : DC 48 V 260 mA/Approx. 12.5 W (Class 0 device) Power Consumption 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 Temperature 10% to 100 % (no condensation) Ambient Operating Humidity Water and Dust Resistance IP66(IEC60529), Type 4X(UL50), NEMA 4X compliant Shock Resistance 50J (IEC 60068-2-75 compliant), IK10 (IEC 62262) EN50155, EN45545(WV-X4571LM only) Railway Application When using the attachment plate only ø154 mm × 60.3 mm (H) {ø6-1/16 inches × 2-3/8 inches (H)} Dome radius 35 mm {1-3/8 inches} When using the base bracket <WV-X4571L> :  $\emptyset$ 164 mm × 96.3 mm (H) { $\emptyset$ 6-15/32 inches × 3-25/32 inches (H)} Dome radius 35 mm {1-3/8 inches} Mass (approx.) When using the attachment plate only: Approx. 880 g {1.94 lbs} When using the base bracket <WV-X4571L> : Approx. 1.3 kg {2.87 lbs} Finish Main body: Aluminum die cast, Light gray Outer fixing screws: Stainless steel (Corrosion-resistant treatment)

Dome section : Polycarbonate resin, Clear

# Optional Accessories For WV-X4571L only.



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,

Notification sent to the monitoring screen Cross line Detection, Object Detection, Scene change Detection

#### **DISTRIBUTED BY:**



<sup>\*2</sup> When "On" is selected for "Super Dynamic(SD)", the frame rate is restricted to a maximum of 15fps

<sup>\*3</sup> Auto VIQS, i-VMD, can not be used at the same time. \*4 Transmission for 2 streams can be individually set.

<sup>\*5</sup> Only use AAC-LC (Advanced Audio Coding - Low Complexity) when recording audio on an SD memory card.

<sup>\*6</sup> 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)