

## iA (intelligent Auto) H.265 Network Camera

Panasonic WV-S1531LN captures the highest quality images automatically even in very challenging and fast-changing surveillance environments. Intelligent Auto (iA) allows the camera to automatically adjust the key settings in real-time depending on the scenery and movement, reducing distortion such as motion blur and moving objects. New industry-leading 144dB dynamic range delivers balanced scene exposure in dynamic and extreme-backlit lighting environments. In addition, color night vision provides outstanding low-light performance with accurate color rendition and saturation from i-Pro's 1/3" sensor, rivaling the performance of costlier 1/2" sensor cameras in the market. The adopted H.265 Smart Coding technology, intelligently reduces bandwidth efficiency of up to 95%\* more than H.264 for longer recording and less storage. Cameras out-of-the-box, support full data encryption streaming and is compliant to FIPS 140-2 Level 1 standards to keep your video secured.

\*Value in Advanced mode with Smart Facial Coding. It depends on the scene.

### Extreme image quality allows evidence to be captured even under challenging conditions

- Auto Shutter speed control for fast moving vehicles
- Sharp and clear images of a walking person day & night
- Outstanding low light performance in true color with low noise for night time applications
- Super Dynamic 144dB for backlit situations involving headlights and shadows on night streets
- Environmental durability : IP66, IK10 and Dehumidification device

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

- Longer recording and less storage compared to any H.264 based compression techniques
- New self-learning ROI\* encoding (Auto VIQS) detects movement within the image and compresses the areas with little motion in order to reduce transmitted data while maintaining the quality of the image.
- New "Smart Facial Coding" adds more bandwidth reduction for ID camera applications mainly capturing faces

\*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

### Key Features

- Full HD 1080p 60fps
- iA (intelligent Auto)
- Extreme Super Dynamic 144dB
- Color night vision (0.0008 to 0.012 lx)
- H.265 Smart Coding
- FIPS 140-2 Level 1 compliant
- ClearSight Coating

### Industry examples

- Public safety (City / Highway toll / Parking gate)
- Transportation (Airport / Train / Subway)
- Retail / Bank / Logistics / Education / Hospital / Building



## Specifications

<b>Camera</b>	Image Sensor	Approx. 1/3 type MOS image sensor	
	Minimum Illumination	Color : 0.012 lx, BW : 0.006 lx (F1.6, Maximum shutter : Off (1/30s), AGC : 11) BW : 0 lx (F1.6, Maximum shutter : Off (1/30 s), AGC : 11, when the IR LED is lit) Color : 0.0008 lx, BW : 0.0004 lx (F1.6, Maximum shutter : max. 16/30s, AGC : 11) **	
	White Balance	AWC (2,000 - 10,000 K), ATW1 (2,700 - 6,000 K), ATW2 (2,000 - 6,000 K)	
	Shutter Speed	1/30 Fix to 1/10000 Fix *1/30 Fix to 2/120 Fix is available during 30 fps mode only. *1/60 Fix is available during 60 fps mode only.	
	Intelligent Auto	On / Off	
	Super Dynamic <sup>2</sup>	On / Off, the level can be set in the range of 0 to 31.	
	Dynamic Range	144 dB (Super Dynamic : On)	
	Adaptive Black Stretch	The level can be set in the range of 0 to 255.	
	Back light compensation / High light compensation	BLC (Back light compensation) / HLC (High light compensation) / Off (only when Super dynamic and Intelligent Auto : Off)	
	Fog compensation	On / Off (only when Intelligent auto / auto contrast adjust : Off)	
	Maximum gain (AGC)	The level can be set in the range of 0 to 11.	
	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 : 40 m (Approx. 131 ft)	
	Digital Noise Reduction	The level can be set in the range of 0 to 255.	
	Video Motion Detection (VMD)	On / Off, 4 areas available	
	Intelligent VMD (i-VMD) <sup>3</sup>	Type 4 * optional plug-in software WV-SAE200	
	Stabilizer <sup>3</sup>	On / Off (available only in the 30 fps mode)	
	Privacy Zone	On / Off (up to 8 zones available)	
	Image rotation <sup>4</sup>	0 ° / 90 ° / 180 ° / 270 °	
	Camera Title (OSD)	On / Off Up to 20 characters (alphanumeric characters, marks)	
	Focus Adjustment	Auto back focus / Manual	
	<b>Lens</b>	Focal length	2.8 - 10 mm {1/8 inches - 13/32 inches}
		Zoom ratio	3.6 x (Motorized zoom / Motorized focus)
Angular Field of View		[16 : 9 mode] Horizontal : 31° (TELE) - 112° (WIDE) Vertical : 17° (TELE) - 60° (WIDE) [4 : 3 mode] Horizontal : 26° (TELE) - 91° (WIDE) Vertical : 19° (TELE) - 67° (WIDE)	
Maximum Aperture Ratio		1 : 1.6 (WIDE) - 1 : 3.4 (TELE)	
Focusing Range		0.3 m {11-13/16 inches} - ∞	
<b>Adjusting Angle</b>	Ceiling mounting	Horizontal : ±180 ° (PAN rotation part) Vertical : 0 ° to 100 ° (TILT rotation part) Yaw : -190 ° to +100 ° (YAW rotation part)	
	Wall mounting	Horizontal : ±100 ° (TILT rotation part)* Vertical : ±100 ° (TILT rotation part)* Yaw : -190 ° to +100 ° (YAW rotation part) * You can change between horizontal and vertical angels by adjusting the PAN rotation part.	
<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	
	GUI / Setup Menu Language	English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese	
<b>Network</b>	Network IF	10Base-T / 100Base-TX, RJ45 connector	
	Resolution	<b>*2 mega pixel [16 : 9] (30/60 fps)</b> 1,920 x 1,080 / 1,280 x 720 / 640 x 360 / 320 x 180	
	H.265/ H.264 JPEG (MJPEG)	<b>*3 mega pixel [4 : 3] (30 fps)</b> 2,048 x 1,536 <sup>5</sup> / 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240	
	H.265/ H.264 <sup>6</sup>	Transmission Mode Unicast / Multicast	
	JPEG	Image Quality 10 steps	

<b>Network</b>	Smart Coding	Smart Facial Coding <sup>3</sup> : On (Smart Facial Coding) / On (Auto VQS) / Off *Smart Facial Coding is only available with Stream(1). GOP (Group of pictures) : On (Advanced) / On (Low) / On (Mid) / Off *On(Advanced) is only available with H.265.	
	Audio Compression	G.726 (ADPCM) : 16 kbps / 32 kbps G.711 : 64 kbps AAC-LC <sup>7</sup> : 64 kbps / 96 kbps / 128 kbps	
	Audio transmission mode	Off / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex)	
	Supported Protocol	IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, 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	
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)	
	SDXC/SDHC/SD	H.265 / H.264 recording : Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure JPEG recording : Manual REC / Alarm REC (Pre/Post) / Backup upon network failure	
	Memory Card (Option)	Compatible SDXC/SDHC/SD Memory 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, Android™ mobile terminals	
	<b>Alarm</b>	Alarm Source	3 terminals input, VMD alarm <sup>8</sup> , Command alarm, Audio detection 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>	Monitor Output (for adjustment)	VBS : 1.0 V [p-p] / 75 Ω, composite, Pin jack An NTSC or PAL signal can be outputted from camera	
	Audio input	Ø3.5 mm stereo mini jack Input impedance: Approx. 2 kΩ (unbalanced) (Applicable microphone : Plug-in power type) Supply voltage : 2.5 V ±0.5 V	
	Audio Output	Ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 Ω (unbalanced)	
<b>General</b>	External I/O Terminals	ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT) (x1 for each)	
	Safety	UL (UL60950-1), CE, IEC60950-1	
	EMC	FCC (Part15 ClassA), EN55032 ClassB, EN55024	
	Power Source and Power Consumption	DC power supply : DC12 V 750 mA, Approx. 9.0 W PoE (IEEE802.3af compliant) Device : DC48 V 195 mA, Approx. 9.4 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) (Power On range : -30 °C to +60 °C (-22 °F to +140 °F))	
	Ambient Operating Humidity	10 to 100 % (no condensation)	
	Water and Dust Resistance	IP66, IEC60529 measuring standard compatible, Type 4X(UL50), NEMA 4X compliant	
	Shock Resistance	IK10 (IEC 62262)	
	Dimensions	130 mm (W) x 130 mm (H) x 337 mm (L)	
	Mass (approx.)	* Installing using the base bracket : 5-1/8 inches (W) x 5-1/8 inches (H) x 13-9/32 inches (L) Approx. 1.6 kg (3.53 lbs) When using the adapter box : Approx. 2.1 kg (4.63 lbs)	
Finish	Main body : Aluminum die cast, Metallic silver Front cover section clear part : Clear polycarbonate resin (ClearSight coating)		

\*1 Converted value

\*2 Super Dynamic function is automatically set off on 60 fps mode.

\*3 Stabilizer, Smart Facial Coding, i-VMD can not be used at the same time.

\*4 When "3 mega pixel [4 : 3](30fps mode)" is selected for "Image capture mode", "90 °" and "270 °" cannot be selected.

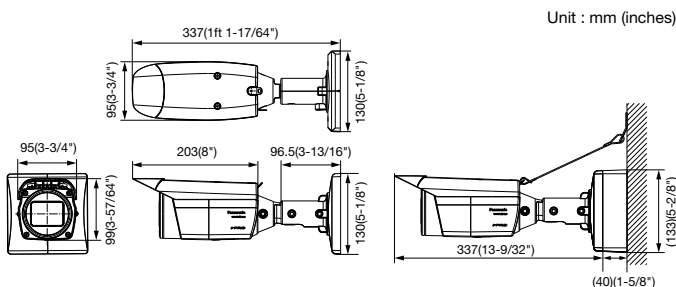
\*5 Used by super resolution techniques

\*6 Transmission for 4 streams can be individually set.

\*7 When recording audio on an SD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity).

\*8 Including alarms from Plug-in Software

## Appearance



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

## Optional Accessories

<b>Pole Mount Bracket</b> <b>WV-Q188</b> (Fine silver)		<b>Corner Mount Bracket</b> <b>WV-Q189</b> (Fine silver)	
<b>Plug-in Software for i-VMD</b> <b>WV-SAE200</b> i-VMD is possible to detect objects in the specified area by advanced video analysis technology. i-VMD : Intruder Detection, Loitering Detection, Direction Detection, Scene Change Detection, Object Detection, Cross Line Detection			
			
Notification sent to the monitoring screen			

### 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.

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