

# **Full HD Indoor Dome Network Camera**

Panasonic WV-S2131 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. By adopting 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, use an encryption module standardized by FIPS Publication 140-2 for secure video streaming.

\*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 object
- 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

## Extreme bandwidth compression with new Panasonic H.265 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
- 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

#### **Key Features**

- Full HD 1080p up to 60fps
- iA (intelligent Auto)
- Extreme Super Dynamic 144dB
- Color night vision (0.0008 to 0.012 lx)
- H.265 Smart Coding
- i-VMD License Bundled
- Onvif Profile G / S / T

#### **Industry examples**

- Airport (Passport control / Security checkpoint / Ticket counter)
- Retail / Bank / Education / Hospital / Building





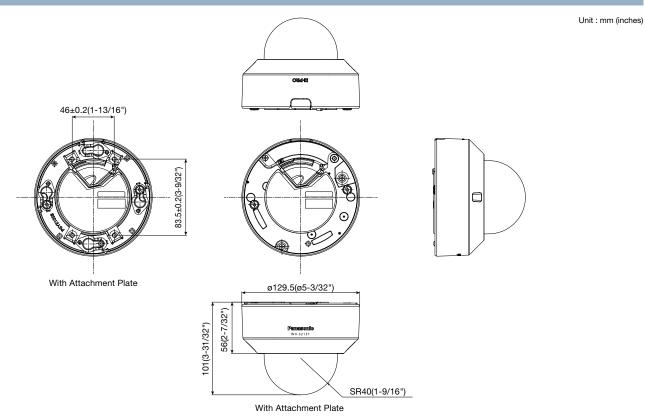
### Specifications

Camera	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)
			Color: 0.0008 lx, BW: 0.0004 lx
			(F1.6, Maximum shutter : max. 16/30s, AGC : 11) *1
	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*2		On / Off, The level can be set in the range of 0 to 31.
	Dynamic Range		Max.144 dB (Super Dynamic : On)
	Adaptive Black Stretch		The level can be set in the range of 0 to 255.
	Back light compensation /		BLC (Back light compensation) / HLC (High light compensation) / Off
	High light compensation		(only when Super dynamic / 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 / Auto1 (Normal) / Auto2 (IR Light) / Auto3 (SCC)
	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)*3		Type 4 *Bundled License
	Stabilizer*3		On / Off (available only in the 30 fps mode)
	Privacy 2		On / Off, Up to 8 zones available
	Image rotation*4		0°/90°/180°/270°
	Camera Title (OSD)		On / Off, Up to 20 characters (alphanumeric characters, marks)
	Focus Adjustment		Auto back focus / Manual
Lens	Focal length		2.8 - 10 mm {1/8 inches - 13/32 inches}
	Zoom ratio		3.6 x (Motorized zoom / Auto Focus)
	Angular Field of View		[16:9 mode] Horizontal: 30° (TELE) – 110° (WIDE)
			Vertical: 17° (TELE) – 59° (WIDE)
			[4:3 mode] Horizontal: 25° (TELE) – 90° (WIDE)
			Vertical : 19° (TELE) – 66° (WIDE)
	Maximum Aperture Ratio		1: 1.6 (WIDE) - 1: 3.4 (TELE)
	Focusing Range		0.3 m {11-13/16 inches} - ∞
Adjusting	g Angle		Horizontal: -240 to +120°, Vertical: ±85°, Yaw: ±100°
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	Network IF		10Base-T / 100Base-TX, RJ45 connector
	Resolution		•2 mega pixel [16 : 9] (30/60 fps)
	H.265/ H.264		1,920 x 1,080 / 1,280 x 720 / 640 x 360 / 320 x 180
	JPEG (MJPEG)		•3 mega pixel [4 : 3] (30 fps)
			2,048 x 1,536°5 / 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240
	H.265/	Transmission Mode	Constant bit rate / VBR / Frame rate / Best effort
	_	Transmission Type	Unicast / Multicast
		Image Quality	10 steps
		,	Smart Facial Coding '3: On (Smart Facial Coding*) / On (Auto VIQS) / Off
	Smart Coding		*Smart Facial Coding •: On (Smart Facial Coding) / On (Auto ViQS) / On *Smart Facial Coding is only available with Stream(1).
			GOP (Group of pictures) : On (Advanced)* / On (Mid) / On (Low) / Off
			*On(Advanced) is only available with H.265.

Network	Audio Compression	G.726 (ADPCM) : 16 kbps / 32 kbps
		G.711 : 64 kbps
		AAC-LC*7 : 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 :
	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 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™ terminals
	ONVIF Profile	G/S/T
Alarm	Alarm Source	3 terminals input, VMD alarm*8, 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
Input/	Monitor Output	VBS: 1.0 V [p-p] / 75 Ω, composite, ø3.5 mm mini jack
Output	(for adjustment)	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)
	External I/O Terminals	ALARM IN 1 (Black & white input, Auto time adjustment input) (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
	Power Source and	DC power supply: DC12 V 460 mA, Approx. 5.6 W
	Power Consumption	PoE (IEEE802.3af compliant) Device :
		DC48 V 125 mA, Approx. 6.0 W (Class 0 device)
	Ambient Operating	-10 °C to +50 °C (14 °F to 122 °F)
	Temperature	
	Ambient Operating Humidity	10 to 90 % (no condensation)
	Dimensions	ø129.5 mm x 101 mm (H) {ø5-3/32 inches x 3-31/32 inches (H)}
		Dome radius 40 mm {1-9/16 inches}
	Mass (approx.)	Approx. 560 g (1.23 lbs)
	Finish	Main body: ABS resin, sail white / Dome section: Aacrylic resin, Clear

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

# **Appearance**



<sup>&</sup>quot;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.

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

## **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: Intruder Detection, Loitering Detection, Direction Detection, Scene Change Detection, Object Detection, Cross Line Detection



Notification sent to the monitoring screen

## **Optional Accessories**

#### Mount Bracket / Dome Cover / Other



<sup>•</sup>Brackets are available in four colors, Fine silver, Light gray, Gray and i-PRO white. It is possible to use them in different color combinations.

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- Safety Precaution : Carefully read the Basic 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

# **Panasonic**

**Panasonic Corporation** 

## Panasonic i-PRO Sensing Solutions Co., Ltd.

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