

WV-X6533LN (Full-HD)

-220

EXTREME

# Long distance IR illumination iA PTZ Camera

Panasonic WV-X6533LN captures the highest quality images automatically even in very challenging and fast-changing surveillance environments. Outstanding Intelligent Zoom Stabilization to increase visibility under blur condition. 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, intelligently reduces bandwidth efficiency up to 95%\* more than conventional H.264 for longer recording and less storage.

# Extreme image quality for evidence capturing under challenging conditions

- Built-in IR LED to produce a clear monochrome image in 0 lux conditions with 350 m (1150 feet) irradiation distance
- Long-distance vision with high power 40x zoom lens and Intelligent Zoom Stabilization with gyroscope
- Sharp and clear image of fast moving vehicles with Intelligent Auto and ClearSight Coating
- Outstanding low light performance in true color with low noise for night time applications
- Environmental durability: IP66, IK10, Long life Pan/Tilt gear mechanism

# Extreme H.265 compression with new Smart Coding

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

# **Key Features**

- Full-HD 1920x1080 60fps
- Long distance IR illumination
- Intelligent Zoom Stabilization with 40x optical zoom
- ClearSight Coating
- Durable Pan/Tilt gear mechanism
- iA (intelligent Auto)
- Color night vision (0.001 to 0.015 lx)
- IP66, IK10 certified
- i-VMD License Bundled

## **Industry examples**

- Traffic
- Safe city
- Railway
- Critical infrastructure
- Airport
- Stadium





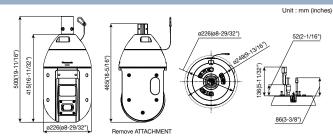
### **Specifications**

Camera	Image Sensor		Approx. 1/2.8 type CMOS image sensor
	Minimum Illumination		Color : 0.015 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 : 0.001 lx, BW : 0.0004 lx
	Intelligent Auto Shutter Speed		(F1.6, Maximum shutter : max. 16/30s, AGC : 11) *1
			On / Off
			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.
	Super D	Dynamic*2	On / Off, the level can be set in the range of 0 to 31.
	Dynamic Range		144 dB (Super Dynamic : On)
	Image Settings		Gain (AGC), White balance
	Image Compensation		Adaptive black stretch, Back light compensation (BLC),
	Ű		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)
	IR LED	Light	High / Middle / Low / Off Maximum irradiation distance
			350 m {approx. 1150 ft}(AC 24 V/ Tested PoE injector)
			150 m {approx. 500 ft}(PoE+ device)
	Video M	otion Detection (VMD)	On / Off, 4 areas available
		ent VMD (i-VMD) *3	Type6 *Bundled License
	Stabiliz		On / Off (available only in the 30 fps mode)
	Privacy	-	Filling / Pixelate / Off (up to 32 zones available)
		a Title (OSD)	On / Off Up to 20 characters (alphanumeric characters, marks)
Lens	Zoom F	· /	40 x Optical zoom (Motorized zoom / Motorized focus)
-0.1.0	Digital (electronic) zoom		16 x
	Focal le		4.25 mm – 170 mm {5/32 inches – 6-11/16 inches}
		Im Aperture Ratio	1 : 1.6 (WIDE) – 1 : 4.95 (TELE)
	Focus r		3.0 m {9 ft 10-1/8 inches} – ∞
		Field of view	[16 : 9 mode] Horizontal : 1.9 ° (TELE) – 66 ° (WIDE)
			Vertical : 1.1 ° (TELE) – 39 ° (WIDE)
			[4 : 3 mode] Horizontal : 1.4 ° (TELE) – 51 ° (WIDE)
			Vertical : 1.1 ° (TELE) – 39 ° (WIDE)
Pan/tilt	Panning	g Range	360° Endless panning
r an/ uit		g Speed	Manual : Approx. 0.065°/s – 150°/s
		, -	Preset : Up to approx. 300°/s
	Tilting F	Range	Operational range : -30° - +210°
			Recommended range <sup>*4</sup> : 0° – 180°
	Tilting S	Speed	Manual : Approx. 0.065°/s – 150°/s
			Preset : Up to approx. 300°/s
	Preset	Positions	256 positions
	Auto M		Auto track / Auto pan / Preset sequence / Patrol
	Self Return		10 s/ 20 s/ 30 s/ 1 min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 30 min/ 60 min
Browser	Camera	Control	Pan/Tilt, Zoom, Focus, Auto mode, Brightness, Preset, AUX,
GUI			Rec. on SD, Log, Viewer software
	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			10Base-T / 100Base-TX, RJ45 connector
literine	Resolut		•[16:9] 1920×1080 / 1280×720 / 640×360 / 320×180
	H.265/		•[ 4:3] 2048×1536* / 1280×960 / 800×600 / VGA / 400×300 / QVGA
		MJPEG)	*Used by super resolution techniques
			Constant bit rate / VBR / Frame rate / Best effort
		Transmission Type	Unicast / Multicast
		Image Quality	10 steps
	2. 20		·

*1 Convert	ted value	*2 When 60 fps i	s selected, the Super Dynamic function is automatically set to off.	
*3 Stabilize	er, Auto tra	ack, Smart Facial C	oding, i-VMD, can not be used at the same time.	

4 If it is out of the recommender lange, part of the image may be missing.
 5 H.265/H.264 can be selected for each stream.
 6 Transmission for 4 streams can be individually set.

## Appearance



#### Trademarks and registered trademarks

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 - Android is a trademark of Google LLC.
 - ONVIF and the ONVIF logo are trademarks or registered trademarks of Onvif Inc.

- All other trademarks identified herein are the property of their respective owners.

#### 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.

## **DISTRIBUTED BY :**

Network	Smart Coding	Smart Facial Coding* : On(Smart Facial Coding)/ On(AUTO VIQS)/ Off
Network	onlart obding	*Smart Facial Coding is only available with Stream(1).
		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.
	Audio Compression	G.726 (ADPCM) : 16 kbps / 32 kbps, G.711 : 64 kbps, AAC-LC*7 : 64 kbps / 96 kbps / 128 kbps
	Audio compression Audio transmission mode	
	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, SMMP, 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
	Maximum concurrent	14 (Number of sessions that can connect to cameras at the same time)
	access number	*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™ mobile terminals
Alarm	Alarm Source	3 terminals input, VMD alarm*8, Command alarm, Audio detection alarm,
		Auto track alarm
	Alarm Actions	SDXC/SDHC/SD memory recording, E-mail notification,
		HTTP alarm notification, Indication on browser, FTP image transfer,
		Panasonic protocol output
Input/	Audio Input	ø3.5 mm stereo mini jack (Audio input is monaural.)
Output		Input impedance: Approx. 2 kΩ (unbalanced)
		(Applicable microphone : Plug-in power type)
		Supply voltage : 4.0 V ±0.5 V
	Audio Output <sup>*9</sup>	ø3.5 mm stereo mini jack (Audio output is monaural.)
		Output impedance : Approx. 600 $\Omega$ (unbalanced)
	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)
General	Safety	UL (UL60950-1), c-UL (CSA C22.2 No.60950-1), CE, IEC60950-1
aonorai	EMC	FCC (Part15 ClassA), ICES003 ClassA, EN55032 ClassA, EN55024
	Power Source and	AC24 V 3.4 A, Approx. 55 W
	Power Consumption	PoE+ (IEEE802.3at compliant): DC 54V 470 mA, Approx. 25 W(Class4 device)
	r ower consumption	Tested POE Injector (60 W) : DC 54V 1.0 A, Approx. 50 W
	Ambient Operating	
	Ambient Operating	-50 °C to +60 °C {-58 °F to +140 °F}
	Ambient Operating Temperature	-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 V/ Tested PoE injector (60 W))*10
		-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 V/ Tested PoE injector (60 W))*10 -30 °C to +60 °C {-22 °F to +140 °F} (PoE+ device)*10
	Temperature	-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 // Tested PoE injector (60 W))*10 -30 °C to +60 °C {-22 °F to +140 °F} (PoE+ device)*10 (Power On range: -30 °C to +60 °C (-22 °F to +140 °F)}
	Temperature Ambient Operating Humidity	-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 /V Tested PoE injector (60 W))*10 -30 °C to +60 °C {-22 °F to +140 °F} (PoE+ device)*10 {Power On range: -30 °C to +60 °C (-22 °F to +140 °F)} 10 to 100 % (no condensation)
	Temperature Ambient Operating Humidity Water and Dust Resistance	-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 // Tested PoE injector (60 W))*10 -30 °C to +60 °C {-22 °F to +140 °F} (PoE+ device)*10 {Power On range: -30 °C to +60 °C (-22 °F to +140 °F)} 10 to 100 % (no condensation) IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant
	Temperature Ambient Operating Humidity Water and Dust Resistance Shock Resistance	-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 // Tested PoE injector (60 W))*10 -30 °C to +60 °C {-22 °F to +140 °F} (PoE+ device)*10 (Power On range: -30 °C to +60 °C (-22 °F to +140 °F)) 10 to 100 % (no condensation) IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC62262)
	Temperature Ambient Operating Humidity Water and Dust Resistance Shock Resistance Wind Resistance	-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 // Tested PoE injector (60 W)*10 -30 °C to +60 °C {-22 °F to +140 °F} (PoE+ device)*10 [Power On range: -30 °C to +60 °C {-22 °F to +140 °F}] 10 to 100 % (no condensation) IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC62262) up to 40 m/s (approx. 89 mph)
	Temperature Ambient Operating Humidity Water and Dust Resistance Shock Resistance Wind Resistance Dimensions	-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 V/ Tested PoE injector (60 W))*10 -30 °C to +60 °C {-22 °F to +140 °F} (PoE+ device)*10 (Power On range: -30 °C to +60 °C (-22 °F to +140 °F)} 10 to 100 % (no condensation) IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC62262) up to 40 m/s (approx. 89 mph) Maximum ø249 mm × 465 mm (H)(ø9-13/16 inches × 18-5/16 inches (H))
	Temperature Ambient Operating Humidity Water and Dust Resistance Shock Resistance Wind Resistance	-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 V/ Tested PoE injector (60 W))*10 -30 °C to +60 °C {-22 °F to +140 °F} (PoE+ device)*10 {Power On range: -30 °C to +60 °C {-22 °F to +140 °F}} 10 to 100 % (no condensation) IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC62262) up to 40 m/s (approx. 89 mph) Maximum 249 mm × 465 mm (H)(g9-13/16 inches × 18-5/16 inches (H)) Approx. 8.2 kg (18.10 lbs)
	Temperature Ambient Operating Humidity Water and Dust Resistance Shock Resistance Wind Resistance Dimensions Mass (approx.)	-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 V/ Tested PoE injector (60 W))*10 -30 °C to +60 °C {-22 °F to +140 °F} (PoE+ device)*10 (Power On range: -30 °C to +60 °C (-22 °F to +140 °F)} 10 to 100 % (no condensation) IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC68262) up to 40 m/s (approx. 89 mph) Maximum 0249 mm × 465 mm (H)(90-13/16 inches × 18-5/16 inches (H)) Approx. 8.2 kg (18.10 lbs) (including attachment pipe : Approx. 200 g (0.44 lbs) and cable cover.)
	Temperature Ambient Operating Humidity Water and Dust Resistance Shock Resistance Wind Resistance Dimensions	-50 °C to +60 °C {-58 °F to +140 °F} (AC 24 V/ Tested PoE injector (60 W))*10 -30 °C to +60 °C {-22 °F to +140 °F} (PoE+ device)*10 {Power On range: -30 °C to +60 °C {-22 °F to +140 °F}} 10 to 100 % (no condensation) IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC62262) up to 40 m/s (approx. 89 mph) Maximum 249 mm × 465 mm (H)(g0-13/16 inches × 18-5/16 inches (H)) Approx. 8.2 kg (18.10 lbs)
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\*7 When recording audio on an SD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity). \*9 The audio output can be switched to the monitor output. Refer to the Operating Instructions on the

Panasonic support web site for descriptions of how to switch the output.

\*10 When using with the IR LED light constantly lit, the upper limit of the operating temperature range is +45°C {+113 °F}.

# **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

# **Optional Accessories**



Panasonic

Notification sent to the monitoring screen

https://security.panasonic.com

f http://www.facebook.com/PanasonicNetworkCamera

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