Panasonic
BUSINESS

WV-X6533LN (Full-HD)

Full HD 40x IR PTZ Network Camera

The Panasonic WV-X6533LN IR-PTZ camera has a powerful 40x optical zoom with infrared light (LED), plus a built in imaging stabilizer enabling Pan/Tilt 360 degree video surveillance up to 350 m under total darkness. Can monitor subjects at long distance range during daytime and also nighttime under zero lux no lighting environment suitable for perimeter surveillance at airports, critical infrastructure, defense, federal & government, manufacturing facilities, and for general city/road surveillance purposes.

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, intelligently reduces bandwidth efficiency up to 95%* more than conventional H.264 for longer recording and less storage.
*Value in Advanced mode with Smart Facial Coding depends on scene.

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
- The visible light cut filter makes it possible to focus on subjects even in environments with a mix of infrared and visible light
- 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
- Dehumidification and defrosting with the defroster device
- Environmental durability: IP66, IK10, Long life Pan/Tilt gear mechanism

Extreme bandwidth compression with new Panasonic H.265 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

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 1920x1080 up to 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, Defroster
- i-VMD License Bundled
- Fiber Optic Media Converter Unit (Optional WV-X65F1)
- Onvif Profile G / S / T

Industry examples
- Traffic
- Safe Cities
- Railway
- Critical infrastructure
- Airport
- Stadium

::: i-PRO

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
		(F1.6, Maximum shutter : max. 16/30s, AGC : 11) *1
	Intelligent Auto	On / Off
	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.
	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)
	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)
	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 Motion Detection (VMD)	On / Off, 4 areas available
	Intelligent VMD (i-VMD) *3	Type4 *Bundled License
	Stabilizer*3	On / Off (available only in the 30 fps mode)
	Privacy Zone	Filling / Pixelate / Off (up to 32 zones available)
	Camera Title (OSD)	On / Off, Up to 20 characters (alphanumeric characters, marks)
Lens	Zoom Ratio	40 x Optical zoom (Motorized zoom / Motorized focus)
		60x HD Extra Optical Zoom (when resolution is 1280x720)
	Digital (electronic) zoom	16 x
	Focal length	4.25 mm – 170 mm {5/32 inches – 6-11/16 inches}
	Maximum Aperture Ratio	1 : 1.6 (WIDE) – 1 : 4.95 (TELE)
	Focus range	3.0 m {9 ft 10-1/8 inches} – ∞
	Angular 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 Range	360° Endless panning
	Panning Speed	Manual : Approx. 0.065°/s – 150°/s Preset : Up to approx. 300°/s
	Tilting Range	Operational range : –30° – +210° Recommended range*4 : 0° – 180°
	Tilting Speed	Manual : Approx. 0.065°/s – 150°/s Preset : Up to approx. 300°/s
	Preset Positions	256 positions
	Auto Mode	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 GUI	Camera Control	Pan/Tilt, Zoom, Focus, Auto mode, Brightness, Preset, AUX,
		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 / Setup Menu Language	English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese
Network	Network IF	10Base-T / 100Base-TX, RJ45 connector
	Resolution*5	•[16 : 9] 1920×1080 / 1280×720 / 640×360 / 320×180
	H.265/ H.264	•[4 : 3] 2048×1536* / 1280×960 / 800×600 / VGA / 400×300 / QVGA
	JPEG (MJPEG)	*Used by super resolution techniques
	H.265/	Transmission Mode	Constant bit rate / VBR / Frame rate / Best effort
	H.264 *6	Transmission Type	Unicast / Multicast
	JPEG	Image Quality	10 steps

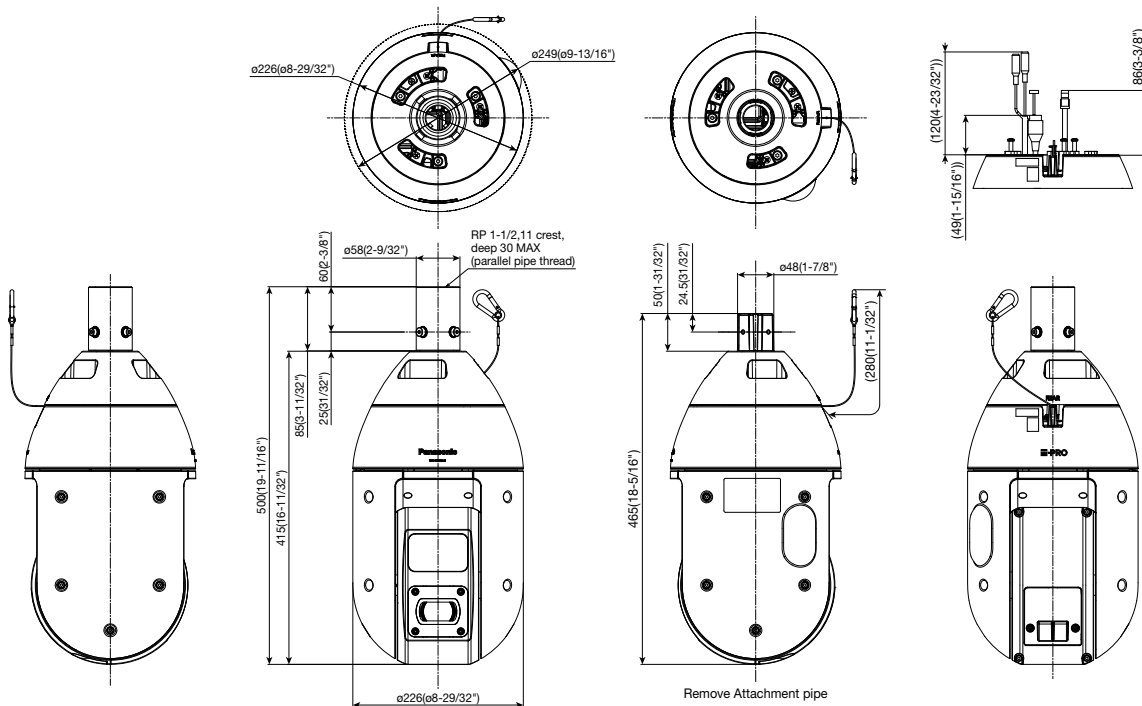| Network	Smart Coding	**Smart Facial Coding*** : On(Smart Facial Coding)/ On(AUTO VIQS)/ Off
		*Smart Facial Coding is only available with Stream(1).
		GOP(Group of pictures) control : On(Frame rate control)*/ On(Advanced)*/ On(Mid.)/ On(Low)/ Off
		*On(Frame rate control) and On(Advanced) are only 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 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
	Maximum concurrent access number	14 (Number of sessions that can connect to cameras at the same time)
		*Depends on network conditions
	SDXC/SDHC/SD Memory Card (Option)	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
		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, 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/ Output	Audio Input	ø3.5 mm stereo mini jack (Audio input is monaural.)
		Input impedance: Approx. 2 kΩ (unbalanced)
		(Applicable microphone : Plug-in power type)
		Supply voltage : 4.0 V ±0.5 V
	Audio Output*9	ø3.5 mm stereo mini jack (Audio output is monaural.)
		Output impedance : Approx. 600 Ω (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
	EMC	FCC (Part15 ClassA), ICES003 ClassA, EN55032 ClassA, EN55024
	Power Source and Power Consumption	AC24 V 3.4 A, Approx. 55 W
		PoE+ (IEEE802.3at compliant): DC 54V 470 mA, Approx. 25 W(Class4 device)
		Tested POE Injector (60 W) : DC 54V 1.0 A, Approx. 50 W
	Ambient Operating Temperature	–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)}
	Ambient Operating Humidity	10 to 100 % (no condensation)
	Dehumidification Device	Temish element+Fan/Heater
	Water and Dust Resistance	IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant
	Shock Resistance	IK10 (IEC62262)
	Wind Resistance	Up to 40 m/s {approx. 89 mph}
	Dimensions	Maximum ø249 mm × 465 mm (H){ø9-13/16 inches × 18-5/16 inches (H)}
	Mass (approx.)	Approx. 8.2 kg {18.10 lbs}
		(including attachment pipe : Approx. 200 g {0.44 lbs} and cable cover.)
	Finish	Main body : Aluminum die cast, Fine silver
		Outer fixing screws : Stainless steel (Corrosion-resistant treatment)
		Front Panel : Polycarbonate resin(with ClearSight coating),
		Clear

*1 Converted value
*2 When 60 fps is selected, the Super Dynamic function is automatically set to off.
*3 Stabilizer, Auto track, Smart Facial Coding, i-VMD, can not be used at the same time.
*4 If it is out of the recommended range, 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.

*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
*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}.
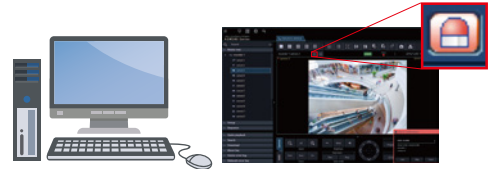
Appearance

Unit : mm (inches)

Remove Attachment pipe

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

■ Fiber Optic Media Converter Unit

Extension Unit
WV-X65F1
(Fine silver)

Fiber Optic Media Converter Unit supports long distance optical networks by converting copper RJ45 to fiber.

• Basic specifications

Power source	24 V AC(50 Hz/60 Hz)
Ambient Operating Temperature :	–40 ℃ to +60 ℃{–40 ℉ to 140 ℉} (Power On range: –30 to +60 {–22 ℉ to 140 ℉})
Ambient Operating Humidity :	10 % to 100 %(no condensation)
Waterproof	IP66(IEC60529)
Shock resistance	IK10(IEC62262)

*Refer to website for compatible SFP modules. https://security.panasonic.com/support/info/ <Control No. : C0504>

• Support specifications for SFP module

SFP Port Type	LC type
Ethernet Speed	100/1000 Mbps
Supply voltage, current	3.3 V typical, Max. 300 mA
SFP Cage	Standard mini-SFP cage (For 6.5 mm pitch SFP)

*Different Color Model WV-S25F1 (Light gray)

■ Mount Bracket / Other

Ceiling surface mount bracket **WV-QCL500-S** (Silver)	Ceiling Mount Bracket **WV-Q121B** (Fine silver)	Wall Mount Bracket **WV-Q122A** (Fine silver)	Pole Mount Bracket **WV-Q188** (Fine silver)	Corner Mount Bracket **WV-Q189** (Fine silver)
			(This bracket requires WV-Q122A.)	(This bracket requires WV-Q122A.)

•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.

Important
– 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.

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