Panasonic
BUSINESS

WV-X6531N (Full-HD)

i-PRO EXTREME

40x Intelligent Zoom Stabilization iA PTZ Camera

Panasonic WV-X6531N 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 of up to 95%* over H.264 for longer recording and less storage. *Value in Advanced mode. It depends on the scene.

Extreme image quality for evidence capturing under challenging conditions
- Long-distance vision with high power 40x zoom lens and Intelligent Zoom Stabilization for pole mounts on roadways
- 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
- Super Dynamic 144dB for backlit situation by headlights and shadows on the streets at night
- Environmental durability: IP66, IK10, Long life Pan/Tilt gear mechanism, Wide operating temperature up to 60 °C (140 °F) and electric dehumidifier
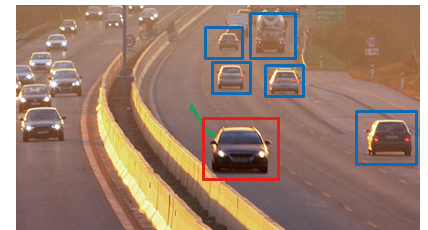
Extreme H.265 compression with new Smart Coding
- Longer recording, less storage compared to H.264 based compression techniques
- New self-learning ROI* encoding (Auto VIQS) dynamically detect motion areas to keep vehicles and human in good picture quality while lowering your bandwidth * Region of Interest

Built-in Vehicle Incident Detection*
- Incident detection: Wrong-way, Stopped vehicle with video analytic technology
- Send alarm to Video Management System and/or Traffic Management System for immediate action
- The function is built-in the camera. No additional server is required.
*Optional software

Wrong-way detection   *The photo is for illustrative purposes only

Key Features

- Full-HD 1920x1080 60fps
- Intelligent Zoom Stabilization with 40x optical zoom
- ClearSight Coating
- Durable Pan/Tilt gear mechanism
- iA (intelligent Auto)
- Extreme Super Dynamic 144dB
- Color night vision (0.001 to 0.015 lx)
- IP66, IK10 certified
- Wider operating temperature range
  -50 °C to +60 °C (-58 °F to +140 °F)

Applications

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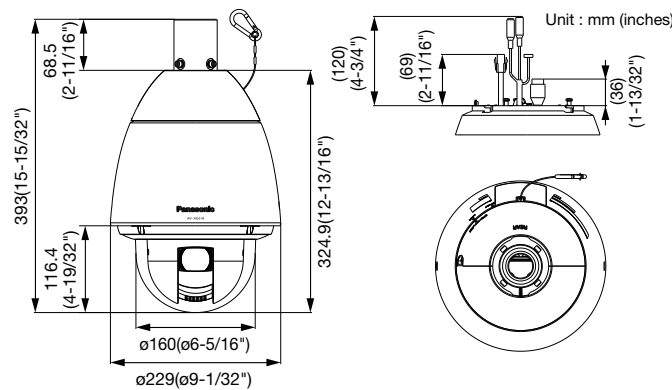- Railway
- Critical infrastructure
- Airport
- Stadium

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Specifications

Camera	Image Sensor	Approx. 1/2.8 type MOS image sensor
	Minimum Illumination	Color : 0.015 lx, BW : 0.006 lx
		(F1.6, Maximum shutter : Off (1/30s), AGC : 11)
		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	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 / Auto1 (Normal) / Auto2 (IR Light) / Auto3 (SCC)
	Video Motion Detection (VMD)	On / Off, 4 areas available
	Intelligent VMD (i-VMD) [3]	Type4 *optional plug-in software WV-SAE200
	Vehicle Incident Detection[3]	Detect "Stopped Vehicle" and "Wrong-way"
		*optional plug-in software WV-XAE100W
	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	40x Optical
	Digital (electronic) zoom	16x
	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 : 2.1 ° (TELE) – 65 ° (WIDE)
		Vertical : 1.2 ° (TELE) – 39 ° (WIDE)
		[4 : 3 mode] Horizontal : 1.6 ° (TELE) – 39 ° (WIDE)
		Vertical : 1.2 ° (TELE) – 39 ° (WIDE)
Pan/tilt	Panning Range	360° Endless panning
	Panning Speed	Manual : Approx. 0.065°/s – 120°/s
		Preset : Up to approx. 300°/s
	Tilting Range	Operational range : –15° – 195° (level – downward – level)
		Recommended range : 0° – 180°
		Selectable tilting angle : 10 ° / 5 ° / 3 ° / 0 °[4] / –3 °[4] / –5 °[4] / –10 °[4] / –15 °[4]
	Tilting Speed	Manual : Approx. 0.065°/s – 120°/s
		Preset : Up to approx. 300°/s
	Preset Positions	256 positions
	Auto Mode	Auto track[3]/ 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 H.265/ H.264 JPEG (MJPEG)	•2 mega pixel [16 : 9] (30/60 fps)
		1920×1080, 1280×720, 640×360, 320×180
		•3 mega pixel [4 : 3] (30 fps)
		2048×1536*, 1280×960, 800×600, VGA, 400×300, QVGA
		*Used by super resolution techniques
	H.265/ H.264[5] Transmission Mode	Constant bit rate / VBR / Frame rate / Best effort
	Transmission Type	Unicast / Multicast
	JPEG Image Quality	10 steps

*1 Converted value
*2 Super Dynamic function is automatically set off on 60 fps mode.
*3 Stabilizer, Auto track, Smart Facial Coding, i-VMD, Vehicle Incident Detection can not be used at the same time.

Network	Smart Coding	Smart Facial Coding[3] : On(Smart Facial Coding)/ On(AUTO VIQS)/ Off
		* Smart Facial Coding is only available with Stream(1).
		GOP(Group of pictures) control : 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[6] : 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	Up to 14 users (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™ mobile terminals
Alarm	Alarm Source	3 terminals input, VMD alarm[7], 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 (monaural input)
		Input impedance: Approx. 2 kΩ (unbalanced)
		(Applicable microphone : Plug-in power type)
		Supply voltage : 4.0 V ±0.5 V
	Audio Output[8]	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	Power Source and Power Consumption	AC24 V 3.4 A, Approx. 55 W
		PoE+ (IEEE802.3at compliant): DC 54V 470 mA, Approx. 25 W
		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))
		–30 °C to +60 °C {–22 °F to +140 °F} (PoE+ device)
		{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), Type 4X (UL50), NEMA 4X compliant
	Shock Resistance	IK10 (IEC62262)
	Dimensions	Maximum ø229 mm × 393 (H) mm {ø9-1/32 inches × 15-15/32 inches (H)}
	Mass (approx.)	Approx. 5.2 kg {11.47 lbs}
	Finish	Main body : Aluminum die cast, Natural silver
		Sunshields : ABS+PC resin coating, Natural silver
		Outer fixing screws : SUS (Corrosion-resistant treatment)
		Dome cover : Polycarbonate resin
		(with ClearSight coating (rain wash coating)), Clear

*4 If "0 °", "–3 °", "–5 °", "–10 °", or "–15 °" is selected, the area hidden by the camera housing may increase when
    the tilt angle of the camera is almost level. When "–15 °" is selected for "Tilt Angle", the upper half of images will be hidden.
*5 Transmission for 4 streams can be individually set.
*6 Only use AAC-LC (Advanced Audio Coding - Low Complexity) when recording audio on an SD memory card.
*7 Including alarms from Plug-in Software
*8 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.

Appearance

Unit : mm (inches)

68.5 (2-11/16")
393(15-15/32")
324.9(12-13/16")
116.4 (4-19/32")
(120) (4-3/4")
(69) (2-11/16")
(36) (1-13/32")
ø160(ø6-5/16")
ø229(ø9-1/32")

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Optional Accessories

Ceiling Mount Bracket
WV-Q121B

Wall Mount Bracket
WV-Q122A

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

Plug-in Software for Vehicle Incident Detection
WV-XAE100W

Camera detects vehicle incidents on the road with video analytics technology.

Target Incident	Wrong-way / Stopped vehicle
Number of Lanes	Max. 4 lanes
Detection scene	Max. 256 preset positions

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.

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