



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

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



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

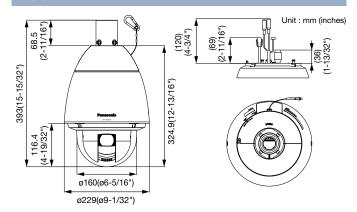


Specifications

	Image Sensor	Approx. 1/2.8 type MOS image sensor
Camera	Minimum Illumination	Color: 0.015 lx, BW: 0.006 lx
	Will ill lidit illustristation	(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
	Shutter Speed	*1/30 Fix to 1/10000 Fix *1/30 Fix to 2/120 Fix is available during 30 fps mode only.
	0 5 : 10	*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} - ∞ [16 : 9 mode] Horizontal : 2.1 ° (TELE) - 65 ° (WIDE)
	Angular Field of view	
		Vertical : 1.2 ° (TELE) – 39 ° (WIDE)
		[4:3 mode] Horizontal: 1.6 ° (TELE) – 51 ° (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	Camera Control	
Browser	Camera Control	Pan/Tilt, Zoom, Focus, Auto mode, Brightness, Preset, AUX, Bec. on SD, Log, Viewer software
Browser GUI		Rec. on SD, Log, Viewer software
	Camera Control Audio	Rec. on SD, Log, Viewer software Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High
	Audio	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High Audio Output : On / Off Volume adjustment: Low / Middle / High
	Audio GUI /	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High Audio Output: On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian,
GUI	Audio GUI / Setup Menu Language	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Audio Output: On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese
	Audio GUI / Setup Menu Language Network IF	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Audio Output: On / Off Volume adjustment: Low / Middle / High Volume adjus
GUI	Audio GUI / Setup Menu Language Network IF Resolution	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High Audio Output: On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese 10Base-T / 100Base-TX, RJ45 connector *2 mega pixel [16: 9] (30/60 fps)
GUI	Audio GUI / Setup Menu Language Network IF Resolution H.265/ H.264	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High Audio Output: On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese 10Base-T / 100Base-TX, RJ45 connector 22 mega pixel [16:9] (30/60 fps) 1920×1080, 1280×720, 640×360, 320×180
GUI	Audio GUI / Setup Menu Language Network IF Resolution	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Audio Output: On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese 10Base-T / 100Base-TX, RJ45 connector *2 mega pixel [16:9] (30/60 fps) 1920×1806, 1280×720, 640×360, 320×180 *3 mega pixel [4:3] (30 fps)
GUI	Audio GUI / Setup Menu Language Network IF Resolution H.265/ H.264	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High Audio Output: On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese 10Base-T / 100Base-TX, RJ45 connector 22 mega pixel [16:9] (30/60 fps) 1920×1080, 1280×720, 640×360, 320×180
GUI	Audio GUI / Setup Menu Language Network IF Resolution H.265/ H.264	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Audio Output: On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese 10Base-T / 100Base-TX, RJ45 connector *2 mega pixel [16:9] (30/60 fps) 1920×1806, 1280×720, 640×360, 320×180 *3 mega pixel [4:3] (30 fps)
GUI	Audio GUI / Setup Menu Language Network IF Resolution H.265/ H.264	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High Audio Output: On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese 10Base-T / 100Base-TX, RJ45 connector *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
GUI	Audio GUI / Setup Menu Language Network IF Resolution H.265/ H.264 JPEG (MJPEG)	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High Audio Output: On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese 10Base-T / 100Base-TX, RJ45 connector *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
GUI	Audio GUI / Setup Menu Language Network IF Resolution H.265/ H.264 JPEG (MJPEG) H.265/ Transmission Mode	Rec. on SD, Log, Viewer software Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High Audio Output: On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese 10Base-T / 100Base-TX, RJ45 connector 2 mega pixel [16:9] (30/60 fps) 1920x1080, 1280x720, 640x360, 320x180 3 mega pixel [4:3] (30 fps) 2048x1536', 1280x960, 800x600, VGA, 400x300, QVGA *Used by super resolution techniques Constant bit rate / VBR / Frame rate / Best effort

- 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

Appearance



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Smart Facial Coding*3 : On(Smart Facial Coding)/ On(AUTO VIQS)/ Off Network Smart Coding 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)
IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, Supported Protocol 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 SDXC/SDHC/SD Up to 14 users (Depends on network conditions) H.265 / H.264 recording Manual REC / Alarm REC (Pre/Post) / Schedule REC / Memory Card (Option) 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) iPad / iPhone, Android™ mobile terminals Mobile Terminal Compatibility 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)
ALARM IN 1 (Black & white input, Auto time adjustment input) (x1), ALARM IN 2 (ALARM OUT) (x1), ALARM IN 3 (AUX OUT) (x1) Power Source and AC24 V 3.4 A, Approx. 55 W Power Consumption 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 -50 °C to +60 °C {-58 °F to +140 °F} (AC 24 V/ Tested PoE injector (60 W)) Temperature -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 Ambient Operating Humidity 10 to 100 % (no condensation)
Water and Dust Resistance IP66 (IEC60529), Type 4X (UL50), NEMA 4X compliant Shock Resistance IK10 (IEC62262) Maximum ø229 mm × 393 (H) mm {ø9-1/32 inches × 15-15/32 inches (H)} Dimensions Mass (approx.) Approx. 5.2 kg {11.47 lbs} : Aluminum die cast, Natural silver Finish Main body 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 o", "-3 o", "-5 o", "-10 o", or "-15 o" is selected, the area hidden by the camera housing may increase when the tilt angle of the camera is almost level. When "-15 o" 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.

Optional Accessories

Ceiling Mount Bracket WV-Q121B







Plug-in Software for i-VMD WV-SAE200

i-VMD is possible to detect objects in the specified area by advanced video analysis

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



- Safety Precaution: Carefully read the Important Information, Installation Guide and
- operating instructions before using this product.

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- other manufacturers' products used on the network
- Masses and dimensions are approximate. Specifications are subject to change without notice.

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