

## 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

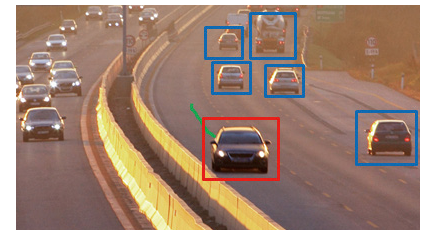
### Extreme H.265 compression with new Smart Coding

- 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



# Specifications

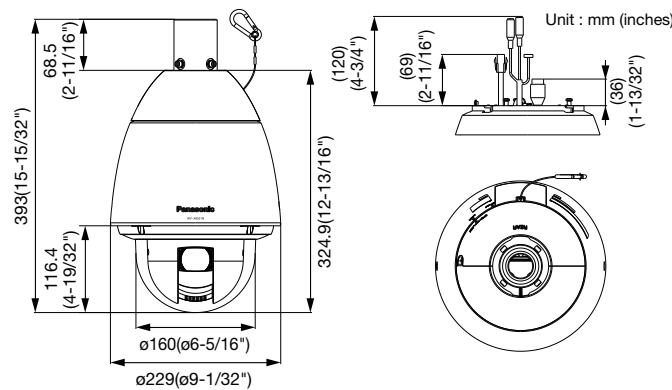
<b>Camera</b>	Image Sensor	Approx. 1/2.8 type MOS image sensor	
	Minimum Illumination	Color : 0.015 lx, BW : 0.006 lx (F1.6, Maximum shutter : Off (1/30s), AGC : 11) Color : 0.001 lx, BW : 0.0004 lx (F1.6, Maximum shutter : Max. 16/30s, AGC : 11) <sup>11</sup>	
	Intelligent Auto	On / Off	
	Shutter Speed	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 <sup>2</sup>	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) <sup>3</sup>	Type4 *optional plug-in software WV-SAE200	
	Vehicle Incident Detection <sup>3</sup>	Detect "Stopped Vehicle" and "Wrong-way" *optional plug-in software WV-XAE100W	
	Stabilizer <sup>3</sup>	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)	
<b>Lens</b>	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) – 51 ° (WIDE) Vertical : 1.2 ° (TELE) – 39 ° (WIDE)	
	<b>Pan/tilt</b>	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° / -3° / -5° / -10° / -15°
		Tilting Speed	Manual : Approx. 0.065°/s – 120°/s Preset : Up to approx. 300°/s
Preset Positions		256 positions	
Auto Mode		Auto track <sup>3</sup> / 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	
<b>Browser GUI</b>	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	
<b>Network</b>	Network IF	10Base-T / 100Base-TX, RJ45 connector	
	Resolution	<b>*2 mega pixel [16 : 9] (30/60 fps)</b> 1920x1080, 1280x720, 640x360, 320x180	
	H.265/ H.264 JPEG (MJPEG)	<b>*3 mega pixel [4 : 3] (30 fps)</b> 2048x1536 <sup>4</sup> , 1280x960, 800x600, VGA, 400x300, QVGA *Used by super resolution techniques	
	H.265/ H.264 <sup>5</sup>	Transmission Mode Constant bit rate / VBR / Frame rate / Best effort	
	JPEG	Transmission Type Unicast / Multicast Image Quality 10 steps	

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

<b>Network</b>	Smart Coding	Smart Facial Coding <sup>3</sup> : 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 <sup>6</sup> : 64 kbps / 96 kbps / 128 kbps	
<b>Alarm</b>	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 Source	3 terminals input, VMD alarm <sup>7</sup> , 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	
	<b>Input/Output</b>	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 <sup>8</sup>	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)
<b>General</b>	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	




<sup>4</sup> 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.  
<sup>5</sup> Transmission for 4 streams can be individually set.  
<sup>6</sup> Only use AAC-LC (Advanced Audio Coding - Low Complexity) when recording audio on an SD memory card.  
<sup>7</sup> Including alarms from Plug-in Software  
<sup>8</sup> 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



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## Optional Accessories


<b>Ceiling Mount Bracket WV-Q121B</b> 	<b>Wall Mount Bracket WV-Q122A</b> 	<b>Plug-in Software for i-VMD WV-SAE200</b> 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
<b>Plug-in Software for Vehicle Incident Detection WV-XAE100W</b> Camera detects vehicle incidents on the road with video analytics technology.		
Target Incident Number of Lanes Detection scene	Wrong-way / Stopped vehicle Max. 4 lanes 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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