

## 40x Intelligent Zoom Stabilization iA PTZ Camera with Heavy salt damage resistance

Panasonic WV-X6531NS captures the highest quality images automatically even in very challenging and fast-changing surveillance environments. It has outstanding Intelligent Zoom Stabilization which increases visibility under blurry conditions. Intelligent Auto (iA) allows the camera to automatically adjust the key settings in real-time depending on the scenery and movement, reducing distortion such as motion blur and moving objects. The adopted H.265 Smart Coding technology, intelligently reduces bandwidth efficiency of up to 95%\* more than H.264 for longer recording and less storage. The Anti-salt air corrosion protection ideal for seaside situations. \*Value in Advanced mode. It depends on the scene.

### Extreme image quality allows evidence to be captured even under challenging conditions

- Long-distance vision with high power 40x zoom lens and Intelligent Zoom Stabilization with gyroscope
- Sharp and clear images 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 situations involving headlights and shadows on night streets
- Environmental durability: IP66, IK10, long life Pan/Tilt gear mechanism, wide range of operating temperatures up to 60 °C (140 °F) and Dehumidification device

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

- Longer recording and less storage compared to H.264 based compression techniques
- New self-learning ROI\* encoding (Auto VIQS) detects movement within the image and compresses the areas with little motion in order to reduce transmitted data while maintaining the quality of the image. \*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 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)
- Salt-air corrosion resistant
- IP66, IK10 certified
- Wider operating temperature range  
-50 °C to +60 °C (-58 °F to +140 °F)
- i-VMD License Bundled

### Industry examples

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



# Specifications

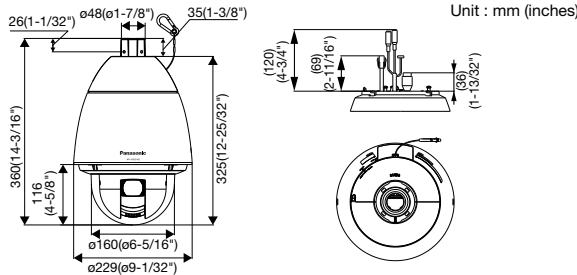
<b>Camera</b>	Image Sensor	Approx. 1/2.8 type MOS image sensor
	Minimum Illumination	Color : 0.015 lx, BW : 0.006 lx (F1.6, Maximum shutter : Off (1/30s), AGC : 11) Color : 0.001 lx, BW : 0.0004 lx (F1.6, Maximum shutter : max. 16/30s, AGC : 11) <sup>*1</sup>
	Intelligent Auto	On / Off
	Shutter Speed	1/30 Fix to 1/10000 Fix <sup>*1</sup> 1/30 Fix to 2/120 Fix is available during 30 fps mode only. <sup>*1</sup> 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 <sup>*</sup> Bundled License
	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 60x HD Extra Optical Zoom (when resolution is 1280x720)
	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
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 <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
	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
Resolution		<b>*2 mega pixel [16 : 9] (30/60 fps)</b> 1920x1080 / 1280x720 / 640x360 / 320x180 <b>*3 mega pixel [4 : 3] (30 fps)</b> 2048x1536 / 1280x960 / 800x600 / VGA / 400x300 / QVGA <sup>*</sup> Used by super resolution techniques
H.265/ H.264 <sup>*5</sup>		Transmission Mode Constant bit rate / VBR / Frame rate / Best effort Transmission Type Unicast / Multicast
JPEG		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, can not be used at the same time.  
<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.

<b>Network</b>	Smart Coding	<b>Smart Facial Coding<sup>*3</sup></b> : On(Smart Facial Coding)/ On(AUTO VIQS)/ Off <sup>*</sup> Smart Facial Coding is only available with Stream(1). <b>GOP(Group of pictures) control</b> : On(Advanced) <sup>*</sup> / On(Mid)/ On(Low)/ Off <sup>*</sup> 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	
	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 <sup>*</sup> , 8 GB <sup>*</sup> , 16 GB <sup>*</sup> , 32 GB <sup>*</sup> , 64 GB <sup>**</sup> , 128 GB <sup>**</sup> , 256 GB <sup>**</sup> model <sup>*</sup> SDHC card, <sup>**</sup> SDXC card (except miniSD card and microSD card)	
	Mobile Terminal Compatibility	iPad / iPhone, Android <sup>TM</sup> mobile terminals	
	<b>Alarm</b>	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 alarm 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 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)	
<b>General</b>	Safety	UL (UL60950-1), c-UL (CSA C22.2 No.60950-1), CE, IEC60950-1	
	EMC	FCC (Part15 ClassA), ICES003 ClassA, EN55032 ClassB, 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 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)	
	Salt damage resistance	ISO14993 compliant	
	Dimensions	Maximum ø229 mm x 360 (H) mm (ø9-1/32 inches x 14-3/16 inches (H))	
	Mass (approx.)	Approx. 5.2 kg (11.47 lbs)	
Finish	Main body : Aluminum die cast with salt resistance painting, Metallic 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>\*5</sup> Transmission for 4 streams can be individually set.  
<sup>\*6</sup> When recording audio on an SD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity).  
<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



**Trademarks and registered trademarks**  
– iPad and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries.  
– 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.

## 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

### Mount Bracket

Ceiling Mount Bracket  
(Heavy salt damage resistance)  
**WV-Q121BS**



Wall Mount Bracket  
(Heavy salt damage resistance)  
**WV-Q122AS**



Make sure to use a mounting bracket with heavy salt damage resistance when installing WV-X6531NS (Heavy salt damage resistance).

DISTRIBUTED BY :

**Panasonic**

<https://security.panasonic.com>

<https://www.facebook.com/Panasonicnetworkcamera/>

(2A-198AL)