

## 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 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
- 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 Dehumidification device

### 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
- FIPS 140-2 Level 1 compliant
- 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)
- IP66, IK10 certified
- Wider operating temperature range  
-50 °C to +60 °C (-58 °F to +140 °F)
- i-VMD License Bundled
- Fiber Optic Media Converter Unit  
(Optional WV-X65F1)

### Industry examples

- Traffic
- Critical infrastructure
- Safe city
- Airport
- Railway
- 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<br>(F1.6, Maximum shutter : Off (1/30s), AGC : 11)<br>Color : 0.001 lx, BW : 0.0004 lx<br>(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<br><sup>*1</sup> 1/30 Fix to 2/120 Fix is available during 30 fps mode only.<br><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 *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  |
| 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)<br>Vertical : 1.2 ° (TELE) – 39 ° (WIDE)<br>[4 : 3 mode] Horizontal : 1.6 ° (TELE) – 51 ° (WIDE)<br>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)<br>Recommended range : 0° – 180°<br>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                        | 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<br>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><br>1920×1080 / 1280×720 / 640×360 / 320×180   |
|                           | H.265/ H.264<br>JPEG (MJPEG)          | <b>*3 mega pixel [4 : 3] (30 fps)</b><br>2048×1536 / 1280×960 / 800×600 / VGA / 400×300 / QVGA<br><sup>*4</sup> Used by super resolution techniques   |
|                           | H.265/<br>H.264 <sup>*5</sup>         | Transmission Mode<br>Constant bit rate / VBR / Frame rate / Best effort   |
|                           | JPEG                                  | Transmission Type<br>Unicast / Multicast<br>Image Quality<br>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.  
<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.

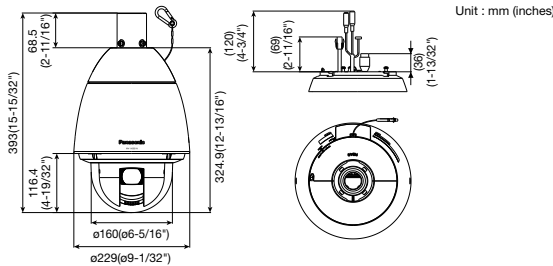
|                      |                                    |  |   |
|----------------------|------------------------------------|--|---|
| <b>Network</b>       | Smart Coding                       | <b>Smart Facial Coding<sup>*3</sup></b> : On(Smart Facial Coding)/ On(AUTO VIQS)/ Off<br>*Smart Facial Coding is only available with Stream(1).<br><b>GOP(Group of pictures) control</b> : On(Advanced)/ On(Mid)/ On(Low)/ Off<br>*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<br>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                       | H.265 / H.264 recording:<br>Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure<br>JPEG recording: Manual REC / Alarm REC (Pre/Post) / Backup upon network failure<br>Compatible SDXC/SDHC/SD Memory Card:<br>Panasonic 2 GB, 4 GB <sup>7</sup> , 8 GB <sup>8</sup> , 16 GB <sup>8</sup> , 32 GB <sup>8</sup> , 64 GB <sup>8</sup> , 128 GB <sup>8</sup> , 256 GB <sup>8</sup> model<br><sup>8</sup> SDHC card, <sup>**</sup> SDXC card (except miniSD card and microSD card) |   |
|                      | Memory Card (Option)               |  |   |
|                      | 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 protocol output |
| <b>Input/ Output</b> | Audio Input                        | ø3.5 mm stereo mini jack (monaural input)<br>Input impedance: Approx. 2 kΩ (unbalanced)<br>(Applicable microphone : Plug-in power type)<br>Supply voltage : 4.0 V ±0.5 V   |   |
|                      | Audio Output <sup>8</sup>          | ø3.5 mm stereo mini jack (monaural output)<br>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<br>PoE+ (IEEE802.3at compliant): DC 54V 470 mA, Approx. 25 W<br>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)<br>(AC 24 V / Tested PoE injector (60 W))<br>-30 °C to +60 °C (-22 °F to +140 °F) (PoE+ device)<br>{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 × 15-1/32 inches (H))   |   |
|                      | Mass (approx.)                     | Approx. 5.2 kg (11.47 lbs)   |   |
|                      | Finish                             | Main body : Aluminum die cast, Natural silver<br>Sunshields : ABS+PC resin coating, Natural silver<br>Outer fixing screws : SUS (Corrosion-resistant treatment)<br>Dome cover : Polycarbonate resin<br>(with ClearSight coating (rain wash coating)), Clear  |   |

## 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

## Appearance



### Trademarks and registered trademarks

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### 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.

## Optional Accessories

### Fiber Optic Media Converter Unit

|  |   |  |
|--|---|--|
| Extension Unit<br><b>WV-X65F1</b><br>(Fine silver) | Fiber Optic Media Converter Unit supports long distance optical networks by converting copper RJ45 to fiber.  | <b>Support specifications for SFP module</b>   |
|  | <b>Basic specifications</b>   |  |
|  | Power source  | 24 V AC(50 Hz/60 Hz)   |
|  | Ambient Operating Temperature   | -40 °C to +60 °C (-40 °F to 140 °F)<br>{Power On range: -30 to +60 (-22 °F to 140 °F)} |
|  | Ambient Operating Humidity  | 10 % to 100 % (no condensation)  |
|  | Waterproof  | IP66(IEC60529)   |
| Shock resistance                                   | IK10(IEC62262)  |  |
|  | <sup>*1</sup> Refer to website for compatible SFP modules.<br><a href="https://security.panasonic.com/support/info/">https://security.panasonic.com/support/info/</a> <Control No. : C0504> |  |

### Mount Bracket

|  |  |   |   |
|--|--|---|---|
| Ceiling Mount Bracket<br><b>WV-Q121B</b> | Wall Mount Bracket<br><b>WV-Q122A</b><br>(Fine silver)<br>Different Color Model<br>WV-Q185<br>(Light gray) | Pole Mount Bracket<br><b>WV-Q188</b><br>(Fine silver)<br>Different Color Model<br>WV-Q182<br>(Light gray) | Corner Mount Bracket<br><b>WV-Q189</b><br>(Fine silver)<br>Different Color Model<br>WV-Q183<br>(Light gray) |
|  |  |   |   |
|  | (These brackets are used with WV-Q122A or WV-Q185.)  | (These brackets are used with WV-Q122A or WV-Q185.)   | (These brackets are used with WV-Q122A or WV-Q185.)   |

• The brackets are available in two colors, Fine silver and Light gray. It is possible to use them in the different color combination.

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