

# WV-X6531N (Full-HD)

1-22N

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

Panasonic

## 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\***

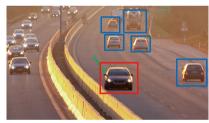
- Incident detection: Wrong-way, Stopped vehicle with video analytic technology
- Send alarm to Video Management System and/or Traffic Management System for immediate action
- The function is built-in the camera. No additional server is required. \*Optional software

## **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**

| Camera     | Image Sensor  | Approx. 1/2.8 MOS image sensor   |
|------------|---|--|
|            | Minimum Illumination  | Color : 0.015 lx, BW : 0.006 lx  |
|            |   | (F1.6, Maximum shutter : Max. 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 to 1/10000  |
|            | Shutter Speed   | *1/30 Fix to 2/120 Fix is available during 30 fps mode only.                       |
|            |   | , , , , , , , , , , , , , , , , , , ,  |
|            | 0   | *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  |
|            | Day/Night (ICR)   | Off / On / Auto1 (Normal) / Auto2 (IR Light) / Auto3 (SCC)                         |
|            | Video Motion Detection  | On / Off, 4 areas available  |
|            | i-VMD   | Intelligent Video Motion Detection *optional plug-in software WV-SAE200            |
|            | Vehicle Incident Detection*3  | Detect "Stopped Vehicle" and "Wrong-way"   |
|            |   | *optional plug-in software WV-XAE100W  |
|            | Image 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  |
| Lens       | 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)                              |
|            | 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*1 : 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       |
|            | Tilt flip   | On / Off   |
| Browser    | Camera Control  | Pan/Tilt, Zoom, Focus, Auto mode, Brightness, Preset, AUX,                         |
| GUI        |   | Rec. on SD, Log, Vierwer software  |
|            | Audio   | Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High                |
|            | , iddio   | Audio Output : On / Off Volume adjustment : Low / Middle / High                    |
|            | GUI /   | English, Italian, French, German, Spanish, Portuguese, Russian,                    |
|            | Setup Menu Language   | Chinese, Japanese  |
| Madernaule | Network IF  | 10Base-T / 100Base-TX, RJ45 connector  |
| Network    |   |  |
|            | Image Resolution  | •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/ Transmission Mode  | Constant bit rate / VBR / Framerate priority / Best effort                         |
|            | H.265/ Transmission Mode<br>H.264*5 Transmission Type<br>JPEG Image Quality |  |

| Network | 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)/ Of            |
|         |   | * 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  |
|         | No. of Simultaneous Users                               | Up to 14 users (Depends on network conditions)                                  |
|         | SDXC/SDHC/SD  | H.265 / H.264 recording :   |
|         | Memory Card (Option)                                    | 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 SD (SDHC/SDXC) 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 (iOS 4.2.1 or later), Android™ mobile terminals                   |
| lorm    | Alarm Source  | 3 terminals input, VMD alarm, Command alarm, Audio detection alarm,             |
| Alarm   | Additio   | Auto track alarm  |
|         | Alarm Actions   | SDXC/SDHC/SD memory recording, E-mail notification,                             |
|         | Aidim Actions   | HTTP alarm notification Indication on browser, FTP image transfer,              |
|         |   | Panasonic protocol output   |
| put/    | Microphone/Line Input                                   | ø3.5 mm stereo mini jack (monaural input)                                       |
| utput   | wild opriorie/Eine input                                | (Applicable microphone : Plug-in power type)                                    |
| utput   |   | Supply voltage : 4.0 V ±0.5 V   |
|         | Audio Output  | ø3.5 mm stereo mini jack (monaural output)                                      |
|         | Addio Odipat  | Output impedance : Approx. 600 Ω (unbalanced)                                   |
|         | External I/O Terminals                                  | ALARM IN 1 (DAY/NIGHT IN, Auto time adjustment) (x1),                           |
|         | External //O Terminais                                  | ALARM IN 2 (ALARM OUT) (x1), ALARM IN 3 (AUX OUT) (x1)                          |
| onorol  | Power Source and  | AC24 V : 3.4 A, 55 W  |
| General | Power Consumption                                       | PoE+ : DC 54V 470 mA, 25 W (IEEE802.3at compliant)                              |
|         | rower consumption                                       | Tested POE Injector (60 W) : DC 54V 1.0 A, 50 W                                 |
|         | Ambient Operating                                       | -50 °C to +60 °C {-58 °F to +140 °F}  |
|         | Temperature   | (AC 24 V/ Tested PoE injector (60 W))   |
|         | remperature   | -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)}                          |
|         |   | 10 to 90 % (no condensation)  |
|         | Ambient Operating Humidity<br>Water and Dust Resistance | IP66 (IEC60529), Type 4X (UL50), NEMA 4X compliant                              |
|         | Shock Resistance  | IK10 (IEC605262)  |
|         | Dimensions  | Maximum ø229 mm × 393 (H) mm  |
|         | Dimensions  |   |
|         | Mana (approx.)  | {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 <sup>*6</sup> : 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 or", "-3 or", "-5 or", "-10 or", or "-15 or" is selected, the area hidden by the camera housing may increase when the tilt angle of the camera is almost level. When "-15 or" is selected for "Tilt Angle", the upper half of

\*\*S 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.

### **Optional Accessories**



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- Android is a trademark of Google Inc.

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#### Important

Unit : mm (inches)

-13/32

- 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.



http://security.panasonic.com

f http://www.facebook.com/PanasonicNetworkCamera

68.5 11/16")

Appearance

## (69) 11/16") (120) (4-3/4") 5 393(15-15/32") 324.9(12-13/16") 116.4 (4-19/32") ø160(ø6-5/16")