# Panasonic
## BUSINESS

# WV-X6511N (HD)

**i-PRO EXTREME**

# 40x Intelligent Zoom Stabilization iA PTZ Camera

Panasonic WV-X6511N 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
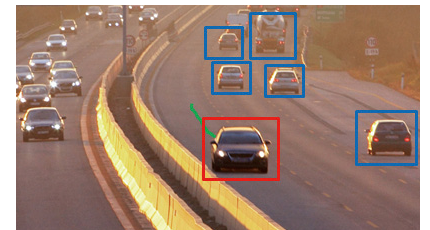
## Extreme H.265 compression with new Smart Coding
- Longer recording, less storage compared to H.264 based compression techniques
- New self-learning ROI* encoding (Auto VIQS) dynamically detect motion areas to keep vehicles and human in good picture quality while lowering your bandwidth  * Region of 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

- HD 1280x720 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 (0.0007 to 0.011 lx)
- IP66, IK10 certified
- Wider operating temperature range
  –50 °C to +60 °C (-58 °F to +140 °F)

## Applications

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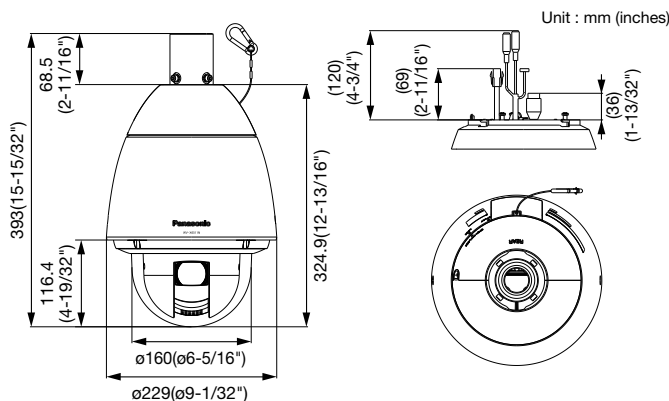- Critical infrastructure
- Airport
- Stadium



**Onvif®** | **S G**

## Specifications

| | | |
|---|---|---|
| **Camera** | Image Sensor | Approx. 1/2.8 MOS image sensor |
| | Minimum Illumination | Color : 0.011 lx, BW : 0.005 lx |
| | | (F1.6, Maximum shutter : Max. 1/30s, AGC : 11) |
| | | Color : 0.0007 lx, BW : 0.0003 lx |
| | | (F1.6, Maximum shutter : Max. 16/30s, AGC : 11)[*1] |
| | Intelligent Auto | On / Off |
| | Shutter Speed | 1/30 to 1/10000 |
| | | *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[*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 |
| | 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 {9ft 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) |
| **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 GUI** | Camera Control | Pan/Tilt, Zoom, Focus, Auto mode, Brightness, Preset, AUX, |
| | | Rec. on SD, Log, Vierwer 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 |
| **Network** | Network IF | 10Base-T / 100Base-TX, RJ45 connector |
| | Image Resolution | •1.3 mega pixel [16 : 9] (30/60 fps) |
| | | 1280×720, 640×360, 320×180 |
| | | •1.3 mega pixel [4:3] (30 fps mode) |
| | | 1280×960, 800×600, VGA, 400×300, QVGA |
| | H.265/ H.264[*5] — Transmission Mode | Constant bit rate / VBR / Framerate priority / Best effort |
| | H.265/ H.264[*5] — Transmission Type | Unicast / Multicast |
| | JPEG — Image Quality | 10 steps |

| | | |
|---|---|---|
| **Network** | Smart Coding | Smart Facial Coding[*3] : 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[*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 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 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 |
| **Alarm** | Alarm Source | 3 terminals input, VMD alarm, 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** | Microphone/Line Input | ø3.5 mm stereo mini jack (monaural input) |
| | | (Applicable microphone : Plug-in power type) |
| | | Supply voltage : 4.0 V ±0.5 V |
| | Audio Output | ø3.5 mm stereo mini jack (monaural output) |
| | | Output impedance : Approx. 600 Ω (unbalanced) |
| | External I/O Terminals | ALARM IN 1 (DAY/NIGHT IN, Auto time adjustment) (x1), |
| | | ALARM IN 2 (ALARM OUT) (x1), ALARM IN 3 (AUX OUT) (x1) |
| **General** | Power Source and Power Consumption | AC24 V : 3.4 A, 55 W |
| | | PoE+ : DC 54V 470 mA, 25 W (IEEE802.3at compliant) |
| | | Tested POE Injector (60 W) : DC 54V 1.0 A, 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 90 % (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[*6]       :ABS+PC resin coating, Natural silver |
| | | Outer fixing screws :SUS (Corrosion-resistant treatment) |
| | | Dome cover           :Polycarbonate resin |
| | | (with ClearSight coating (rain wash coating)), Clear |

*1 Converted value  *2 Super Dynamic function is automatically set off on 60 fps mode.
*3 Image Stabilizer, Auto track, Smart Facial Coding, Vehicle Incident Detection can not be used at the same time.
*4 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.
*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.

## Appearance

Unit : mm (inches)



68.5 (2-11/16")
393(15-15/32")
116.4 (4-19/32")
324.9(12-13/16")
ø160(ø6-5/16")
ø229(ø9-1/32")
(120) (4-3/4")
(69) (2-11/16")
(36) (1-13/32")

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## Optional Accessories

**Ceiling Mount Bracket**
**WV-Q121B**

**Wall Mount Bracket**
**WV-Q122A**

**Plug-in Software for i-VMD**
**WV-SAE200**

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

**Plug-in Software for Vehicle Incident Detection**
**WV-XAE100W**

Camera detects vehicle incidents happened on the road with video analytics.

| | |
|---|---|
| Target Incident | Wrong-way / Stopped vehicle |
| Number of Lanes | Max. 4 lanes |
| Detection scene | 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.