H.265 FHD IR PTZ Network Camera

WV-X6533LN (Outdoor 40x zoom model)
WV-S6532LN (Outdoor 22x zoom model)

Ver. 1.00

Security Systems Business Division
Panasonic Co., Ltd.
How to achieve wide area surveillance even in dark environments such as night?

Built-in IR LED and high magnification optical zoom in new PTZ cameras to realize wide area surveillance at night.
Concept & Main Features

New i-PRO extreme camera built-in IR-LEDs enable the capture of low light evidence even at distances 350 meter away in a 0 lux environment.

**Extreme Visibility**
- View objects in dark condition with IR LED with new auto focus
- High powered 40x optical zoom / Intelligent zoom stabilization
- ClearSight coating
- Dehumidification and defrosting with the new defroster
- Intelligent Auto / 30 degree elevation angle

**Extreme Compression**
- H.265 compression with new smart coding technology

**Extreme Analytics**
- i-VMD (intelligent Video Motion Detection) license bundled

**Extreme Data Security**
- Secure communication with Digicert (Formerly Symantec) certification

**Extreme Reliability**
- Vandal resistant / IP66 compliant

**Usability**
- Support Fiber Optic Media Converter Unit (Option)
✅ **View objects in dark conditions**
Enables user to see an object at 350m away with built-in IR-LED lighting even in a 0 lux environment.

New i-PRO extreme camera WV-X6533LN
Extreme Visibility

✓ View objects in dark conditions
Improve visibility and low-light environments by mixing visible and IR LED lighting through a new auto focus with visible light cut filter

Other leading brand camera

i-PRO Extreme camera WV-X6533LN

Under visible light

New Auto Focus

Zoom in

New i-PRO extreme camera WV-X6533LN
✓ **High powered 40x optical zoom**

40x optical zoom function can survey further, and clearly see objects at long distances.
Extreme Visibility

✓ **Intelligent zoom stabilization**

Enables the capture of a stabilized image even when the object is located a long distance away by absorbing vibrations.
Extreme Visibility

**ClearSight coating**

The specially coated (ClearSight) cover resists water, stains, and dust accumulation, enabling the capture of clear images even in rainy environments, reducing the need for periodic maintenance.

Without any special coating

With ClearSight coating

It shows clear images even if IR-LEDs are on when it is rain

With ClearSight coating

Without any special coating
Extreme Visibility

- **Dehumidification and defrosting with the new defroster**
  By the defroster on the transparent cover part on the front of the lens, against temperature drop inside the camera, the temperature inside the camera is kept properly to prevent dew condensation.

Quick defrosting

Enables to capture clear image with the new defroster under extreme environments
**Extreme Visibility**

- **iA (Intelligent Auto)**

  iA monitors scene dynamics and motion to adjust key camera settings automatically all in real-time, reducing distortion such as motion blur on moving objects.

  **iA OFF**

  ![Image of iA OFF](image1.png)

  **iA ON**

  ![Image of iA ON](image2.png)
Extreme Visibility

✓ 30 degree elevation angle
Enables to monitor dam release, landslide, iron tower and slope road by using with 30 degrees elevation angle from low installation location.

Smart phone camera image
Extreme Compression

✓ **H.265 compression with new smart coding technology**

**GOP control**
Reduces encoding data by using p-frame in place of i-frame when no motion is detected.

**Frame control**
Dynamically reduce the i-frame rate to reduce the amount of data.

**Auto-VIQS**
Automatically determines areas with and without motion and reduce the data volume of those without motion. It has built in "Smart Facial Coding" which detects faces at high quality.

**Bit rate reduction**
Conventional H.264

- **i-PRO extreme H.265 + Smart coding**
  - Max. 95%
  - Value in bit rate depends on scene

*Simulated image*
Extreme Analytics

- i-VMD (Intelligent Video Motion Detection) license bundled
Extreme Data Security

✔ Secure communication with DigiCert (Formerly Symantec) certification

Vulnerability Assessment
- 3rd party assessment and penetration tests made to achieve higher security standards

DigiCert (Formerly Symantec) Device Certification
- Pre-installed DigiCert ( formerly Symantec ) Certification
- Video tampering detection

End-to-End Data Encryption
- Support full encryption communication
- Camera encryption recording on-the-edge

FIPS140-2 Level 1 CAVC compliant
(Federal Information Processing Standardization)
- For federal/public safety usage

Panasonic BUSINESS
Extreme Reliability

Achieve high endurance and long life usage under extreme conditions

- Dustproof Test
- High-Temperature Test
- Pressure Test
- Earthquake Test
- Waterproof Test

- Lifetime Test
- Thunder Test
- Static Electricity Test
- Drop Test
- Box Shaking Test

Panasonic BUSINESS
Extreme Reliability

Vandal resistant (IK10) under challenging environments
Extreme Reliability

✓ **High Durability Mechanism for PTZ Cameras**
The precise gear drive allows longer life than belt-drive and reduce replacement & field dispatch costs.

Pan/Tilt Gear Drive
(No backlash mechanism)

Around 4 times longer lifespan than conventional rubber belt drive
**Usability**

- **Support Fiber Optic Media Converter Unit (Option)**
  The optional optical interface mounting bracket with optical media converter reduces installation time and enables construction of a long distance monitoring system without spending time on selecting and evaluating the optical media converter.

**Current**

- SPF module*

**New solution**

- Optical Fiber Optic Media Converter Unit WV-X65F1
  - Built-in optical media converter
  - Sold separately

Incorporate an SFP module into mounting bracket

*Sold separately
<table>
<thead>
<tr>
<th>Specifications</th>
<th>WV-S6530N</th>
<th>WV-S6532LN</th>
<th>WV-X6531N</th>
<th>WV-X6533LN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image sensor</td>
<td>1 / 2.9 type CMOS</td>
<td>1 / 2.8 type CMOS</td>
<td></td>
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<tr>
<td>Zoom ratio</td>
<td>21x</td>
<td>22x</td>
<td>40x</td>
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<tr>
<td>Max. frame rate</td>
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<td>60 fps</td>
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<tr>
<td>Minimum Illumination</td>
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<tr>
<td>*Shutter speed 1/30s</td>
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<tr>
<td>Color</td>
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<tr>
<td>B/W</td>
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<tr>
<td>0.015 lx @ F1.6, 0.001 lx @ shutter speed 16/30</td>
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<tr>
<td>Angular Field of View</td>
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<tr>
<td>*16:9 mode</td>
<td>3.4° (Tele) – 73° (Wide)</td>
<td>3.4° (Tele) – 66° (Wide)</td>
<td>2.1° (Tele) – 65° (Wide)</td>
<td>1.9° (Tele) – 66° (Wide)</td>
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<tr>
<td>Horizontal</td>
<td>2.0° (Tele) – 42° (Wide)</td>
<td>2.0° (Tele) – 39° (Wide)</td>
<td>1.2° (Tele) – 39° (Wide)</td>
<td>1.1° (Tele) – 39° (Wide)</td>
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<td>Vertical</td>
<td></td>
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<tr>
<td>IR LED</td>
<td>100m (AC24V/60W PoE/PoE+)</td>
<td></td>
<td></td>
<td>350m (AC24V/60W PoE/PoE+)</td>
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<tr>
<td>Day/Night function</td>
<td>IR cut filter ⇔ blank glass</td>
<td>IR cut filter ⇔ visible light cut filter</td>
<td>IR cut filter ⇔ blank glass</td>
<td>IR cut filter ⇔ visible light cut filter</td>
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<td>Image stabilizer</td>
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<tr>
<td>Fiber Optic Media Converter Unit (Option)</td>
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<td>ClearSight</td>
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<td>Environmental</td>
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<td>IP66, Type 4X(UL50E), NEMA 4X compliant, 50J (IEC60068-2-75 compliant), IK10</td>
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<tr>
<td>Power Source</td>
<td>AC24V / PoE+</td>
<td>AC24V / PoE+ / 60W PoE</td>
<td>AC24V / PoE+ / 60W PoE</td>
<td>AC24V / PoE+ / 60W PoE</td>
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<tr>
<td>Dimension (mm)</td>
<td>ø229 x 360 (H)</td>
<td>ø226 x 415 (H)</td>
<td>ø229 x 360 (H)</td>
<td>ø226 x 415 (H)</td>
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Optional Accessories

- Optional brackets and optical fiber I/F

- **Wall mount**
  - WV-Q122A (Light Silver)

- **Pole mount**
  - WV-Q185 (Light Gray)

- **Corner mount**
  - WV-Q188 (Light Silver)
  - WV-Q189 (Light Silver)

- **Ceiling mount**
  - WV-Q121B (Light Silver)

- WV-X65F1 (Fine Silver)
Those cameras are suitable under the extreme conditions

- Safe city
- Transportation (Airport / Train / Subway)
- Critical infrastructure
- Stadium
- and more.