

Full HD Outdoor Bullet Network Camera

Panasonic WV-S1531LN captures the highest quality images automatically even in very challenging and fast-changing surveillance environments. 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. New industry-leading 144dB dynamic range delivers balanced scene exposure in dynamic and extreme-backlit lighting environments. In addition, color night vision provides outstanding low-light performance with accurate color rendition and saturation from i-Pro's 1/3" sensor, rivaling the performance of costlier 1/2" sensor cameras in the market. By adopting H.265 Smart Coding technology, intelligently reduces bandwidth efficiency of up to 95%* more than H.264 for longer recording and less storage. Cameras out-of-the-box, use an encryption module standardized by FIPS Publication 140-2 for secure video streaming.

*Value in Advanced mode with Smart Facial Coding. It depends on the scene.

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

- Auto Shutter speed control for fast moving vehicles
- Sharp and clear images of a walking person day & night
- 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 and Dehumidification device

Extreme bandwidth compression with new Panasonic H.265 Smart Coding

- Longer recording and less storage compared to any 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.
- New "Smart Facial Coding" adds more bandwidth reduction for ID camera applications mainly capturing faces

*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 1080p up to 60fps
- iA (intelligent Auto)
- Extreme Super Dynamic 144dB
- Color night vision (0.0008 to 0.012 lx)
- H.265 Smart Coding
- ClearSight Coating
- i-VMD License Bundled
- Onvif Profile G / S / T

Industry examples

- Public safety (City / Highway toll / Parking gate)
- Transportation (Airport / Train / Subway)
- Retail / Bank / Logistics / Education / Hospital / Building



i-PRO

Specifications

| | | |
|------------------------|---|--|
| Camera | Image Sensor | Approx. 1/3 type MOS image sensor |
| | Minimum Illumination | Color : 0.012 lx, BW : 0.006 lx (F1.6, Maximum shutter : Off (1/30s), AGC : 11) BW : 0 lx (F1.6, Maximum shutter : Off (1/30 s), AGC : 11, when the IR LED is lit) Color : 0.0008 lx, BW : 0.0004 lx (F1.6, Maximum shutter : max. 16/30s, AGC : 11) *1 |
| | White Balance | AWC (2,000 - 10,000 K), ATW1 (2,700 - 6,000 K), ATW2 (2,000 - 6,000 K) |
| | Shutter Speed | 1/30 Fix to 1/10000 Fix *1/30 Fix to 2/120 Fix is available during 30 fps mode only. *1/60 Fix is available during 60 fps mode only. |
| | Intelligent Auto | On / Off |
| | Super Dynamic ² | On / Off, The level can be set in the range of 0 to 31. |
| | Dynamic Range | Max.144 dB (Super Dynamic : On) |
| | Adaptive Black Stretch | The level can be set in the range of 0 to 255. |
| | Back light compensation / High light compensation | BLC (Back light compensation) / HLC (High light compensation) / Off (only when Super dynamic / Intelligent Auto : Off) |
| | Fog compensation | On / Off (only when Intelligent auto / auto contrast adjust : Off) |
| | Maximum gain (AGC) | The level can be set in the range of 0 to 11. |
| | Color/BW (ICR) | Off / On (IR Light Off) / On (IR Light On) / Auto1 (IR Light Off) / Auto2 (IR Light On) / Auto3 (SCC) |
| | IR LED Light | High / Middle / Low / Off, Maximum irradiation distance : 40 m (Approx. 131 ft) |
| | Digital Noise Reduction | The level can be set in the range of 0 to 255. |
| | Video Motion Detection (VMD) | On / Off, 4 areas available |
| | Intelligent VMD (i-VMD) ³ | Type 4 *Bundled License |
| | Stabilizer ³ | On / Off (available only in the 30 fps mode) |
| | Privacy Zone | On / Off, Up to 8 zones available |
| | Image rotation ⁴ | 0° / 90° / 180° / 270° |
| | Camera Title (OSD) | On / Off, Up to 20 characters (alphanumeric characters, marks) |
| Focus Adjustment | Auto back focus / Manual | |
| Lens | Focal length | 2.8 - 10 mm {1/8 inches - 13/32 inches} |
| | Zoom ratio | 3.6 x (Motorized zoom / Motorized focus) |
| | Angular Field of View | {16 : 9 mode} Horizontal : 31° (TELE) - 112° (WIDE) Vertical : 17° (TELE) - 60° (WIDE) {4 : 3 mode} Horizontal : 26° (TELE) - 91° (WIDE) Vertical : 19° (TELE) - 67° (WIDE) |
| | Maximum Aperture Ratio | 1 : 1.6 (WIDE) - 1 : 3.4 (TELE) |
| | Focusing Range | 0.3 m (11-13/16 inches) - ∞ |
| Adjusting Angle | Ceiling mounting | Horizontal : ±180° (PAN rotation part) Vertical : 0° to 100° (TILT rotation part) Yaw : -190° to +100° (YAW rotation part) |
| | Wall mounting | Horizontal : ±100° (TILT rotation part)* Vertical : ±100° (TILT rotation part)* Yaw : -190° to +100° (YAW rotation part) * You can change between horizontal and vertical angels by adjusting the PAN rotation part. |
| Browser GUI | Camera Control | Brightness, AUX On / Off |
| | Audio | Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High Audio Output : On / Off Volume adjustment : Low / Middle / High |
| Network | Network IF | 10Base-T / 100Base-TX, RJ45 connector |
| | Resolution | *2 mega pixel [16 : 9] (30/60 fps) 1,920 x 1,080 / 1,280 x 720 / 640 x 360 / 320 x 180 |
| | H.265 / H.264 JPEG (MJPEG) | *3 mega pixel [4 : 3] (30 fps) 2,048 x 1,536 ⁵ / 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240 |
| | H.265 / H.264 ⁶ JPEG | Constant bit rate / VBR / Frame rate / Best effort Unicast / Multicast 10 steps |
| | Transmission Mode Transmission Type Image Quality | |

| | | | |
|----------------------|---|---|--|
| Network | Smart Coding | Smart Facial Coding³ : On (Smart Facial Coding*) / On (Auto VIQS) / Off *Smart Facial Coding is only available with Stream(1). GOP (Group of pictures) : On (Advanced) / On (Mid) / On (Low) / Off *On(Advanced) is only available with H.265. | |
| | Audio Compression | G.726 (ADPCM) : 16 kbps / 32 kbps G.711 : 64 kbps AAC-LC ⁷ : 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 SDXC/SDHC/SD Memory 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, Android™ terminals | |
| | ONVIF Profile | G / S / T | |
| | Alarm | Alarm Source | 3 terminals input, VMD alarm ⁸ , Command alarm, Audio detection alarm |
| | | Alarm Actions | SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, FTP image transfer, Panasonic alarm protocol output |
| Input/ Output | Monitor Output (for adjustment) | VBS : 1.0 V [p-p] / 75 Ω composite, Pin jack An NTSC or PAL signal can be outputted from camera | |
| | Audio input | ø3.5 mm stereo mini jack Input impedance: Approx. 2 kΩ (unbalanced) (Applicable microphone : Plug-in power type) Supply voltage : 2.5 V ±0.5 V | |
| | Audio Output | ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 Ω (unbalanced) | |
| General | 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) | |
| | 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 | DC power supply : DC12 V 750 mA, Approx. 9.0 W PoE (IEEE802.3af compliant) Device : DC48 V 195 mA, Approx. 9.4 W (Class 0 device) | |
| | Ambient Operating Temperature | IR LED : On -40 °C to +50 °C (-40 °F to 122 °F), IR LED : Off -40 °C to +60 °C (-40 °F to 140 °F) (Power On range : -30 °C to +60 °C (-22 °F to +140 °F)) | |
| | Ambient Operating Humidity | 10 to 100 % (no condensation) | |
| | Dehumidification Device | Rosahl element | |
| | Water and Dust Resistance | IP66, IEC60529 measuring standard compatible, Type 4X(UL50), NEMA 4X compliant | |
| | Shock Resistance | IK10 (IEC 62282) | |
| | Dimensions | 130 mm (W) x 130 mm (H) x 337 mm (L) * Installing using the base bracket {5-1/8 inches (W) x 5-1/8 inches (H) x 13-9/32 inches (L)} | |
| Mass (approx.) | Approx. 1.6 kg (3.53 lbs) When using the adapter box : Approx. 2.1 kg (4.63 lbs) | | |
| Finish | Main body : Aluminum die cast, Metallic silver Front cover section clear part : Polycarbonate resin (with ClearSight coating), Clear | | |

*1 Converted value

*2 Super Dynamic function is automatically set off on 60 fps mode.

*3 Stabilizer, Smart Facial Coding, i-VMD can not be used at the same time.

*4 When "3 mega pixel [4 : 3](30fps mode)" is selected for "Image capture mode", "90 °" and "270 °" cannot be selected.

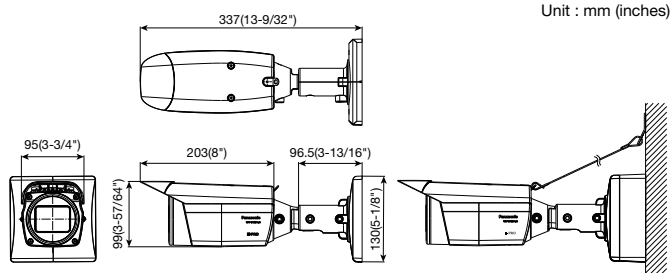
*5 Used by super resolution techniques

*6 Transmission for 4 streams can be individually set.

*7 When recording audio on an SD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity).

*8 Including alarms from Plug-in Software

Appearance



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Important

- Safety Precaution : Carefully read the Basic 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
VV-QCL100-W
(i-PRO white)



*For indoor installation only

Pole Mount Bracket
VV-Q188
(Fine silver)



Corner Mount Bracket
VV-Q189
(Fine silver)



- Brackets are available in four colors, Fine silver, Light gray, Gray and i-PRO white. It is possible to use them in different color combinations.

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