5MP Outdoor Bullet Network Camera

Designed to equip security professionals with the best possible CCTV footage for evidence, the WV-S1552L captures high-quality 5MP images even in very challenging, dynamic and exposed environments that require reliable hardware. To adjust key camera settings automatically in real time, improved intelligent auto (iA) monitors scene dynamics and motion, and captures clear images while reducing distortion such as motion blur on moving objects.

In order to save bandwidth at 50%* lower than existing cameras and maintain image quality, the improved Smart Coding technology optimizes video compression through captured scene. *Compared to Smart Coding OFF with H.265

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

- 5MP image sensor realize wide area surveillance with improved high-quality images
- Auto shutter speed control for moving objects
- Outstanding low-light performance in true color with low noise for nighttime applications
- Built-in IR LED to produce a clear monochrome image in 0 lux conditions with 40 m (131 feet) irradiation distance
- Environmental durability: IP66, IK10

Extreme bandwidth compression with evolved Smart Coding

- Longer recording and less storage requirements compared to traditional H.265 compression techniques
- Improved video compression technology detects objects such as faces, humans, vehicles and motorcycles / bicycles within the image and compresses the areas without objects in order to reduce transmitted data while maintaining image quality

Easy installation

- Allows you to connect the network cable to the camera body simply by opening a part of the package, which saves you time and workspace, especially when handling multiple cameras

Key Features

- 5-megapixel images up to 30fps
- intelligent Auto
- Color night vision (0.0044 to 0.07 lx)
- H.265 Smart Coding
- FIPS140-2 CAVP compliant
 *Using encryption module standardized by FIPS publication 140-2
- i-VMD License Bundled
- ONVIF® Profile G / S / T
 *ONVIF is a trademark of ONVIF, Inc.

Industry examples

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



Specifications

Camera	Image 9	Sensor	1/2.8 type CMOS image sensor
	Minimum Illumination		Color : 0.07 lx, BW : 0.04 lx
	I I I I I I I I I I I I I I I I I I I		(50IRE, F1.3, Maximum shutter : Off (1/30s), AGC : 11)
			BW : 0 lx
			(50IRE, F1.3, Maximum shutter: Off (1/30 s), AGC: 11, when the IR LED is lit)
			Color: 0.0044 lx, BW: 0.003 lx
			(50IRE, F1.3, Maximum shutter : max. 16/30s, AGC : 11) *1
	\A/I=:4= F)-l	ATW1/ATW2/AWC
	White Balance Shutter Speed Intelligent Auto Super Dynamic Dynamic Range		
			[30fps mode] 1/30 Fix to 1/10000 Fix [25fps mode] 1/25 Fix to 1/10000 Fix
			On / Off
			On / Off, The level can be set in the range of 0 to 31.
			Max.132 dB (Super Dynamic : On, Level : 30 or more, 15fps *2)
		e 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
			The level can be set in the range of 0 to 31.
			(only when Super dynamic / Intelligent Auto : Off)
			On / Off, The level can be set in the range of 0 to 8
			(only when Intelligent auto / auto contrast adjust : Off)
	Maximu	ım gain	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
	Scene Change Detection (SCD)		
	Intelligent VMD (i-VMD)		Type 7 *Bundled License
	Privacy Zone		On / Off, Up to 8 zones available
	Image rotation*3 *4		0 ° (Off) / 90 ° / 180 ° (Upside-down) / 270 °
Lens	Camera Title (OSD)		On / Off, Up to 20 characters (alphanumeric characters, marks)
Lens	Optical zoom		3.1x (Motorized zoom / Motorized focus)
	Extra optical zoom		3.1x - 9.3x (when resolution is 640x360)
	Digital (electronic) zoom		Choose from 3 levels of x1, x2, x4
	Focal length		2.9 mm – 9 mm {1/8 inches – 11/32 inches}
	Maximum Aperture Ratio		1 : 1.3 (WIDE) – 1 : 2.5(TELE)
	Focus range		0.3 m {11-13/16 inches} – ∞
	Angular Field of View		[16:9 mode] Horizontal: 34° (TELE) – 106° (WIDE), Vertical: 19° (TELE) – 57° (WIDE)
			[4:3 mode] Horizontal: 34° (TELE) – 106° (WIDE), Vertical: 25° (TELE) – 77° (WIDE)
DORI *5	Detect (25ppm / 8ft)		Wide: 46.3 m / 151.90 ft, Tele: 200.96 m / 659.32 ft
		e (62.5ppm / 19ft)	Wide: 18.52 m / 60.76 ft, Tele: 80.38 m / 263.72 ft
		ize (125ppm / 38ft)	Wide: 9.26 m / 30.38 ft, Tele: 40.19 m / 131.86 ft
		(250ppm / 76ft)	Wide: 4.63 m / 15.19 ft, Tele: 20.1 m / 65.93 ft
Adjusting	Ceiling mounting		Horizontal: ±180 ° (Adjust by horizontal (PAN) angle)
Angle			Vertical : 0 ° to 100 ° (Adjust by vertical (TILT) angle)
			Yaw : -190 ° to +100 ° (Adjust by azimuth (YAW) angle)
	Wall mounting		Horizontal: ±100 ° (Adjust by vertical (TILT) angle)*
	_		Vertical : ±100 ° (Adjust by vertical (TILT) angle)*
			Yaw : -190 ° to +100 ° (Adjust by azimuth (YAW) angle)
			*You can change between horizontal and vertical angels by adjusting
			the horizontal (PAN) angle.
Browser	Camera Control		Brightness, AUX On / Off
GUI	Audio		Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High
			Audio Output : On / Off Volume adjustment : Low / Middle / High
	GUI / Setup Menu Language		
Network	Network IF		10Base-T / 100Base-TX, RJ45 connector
	Resolution*6		[16:9 mode] 3072 x 1728 ¹⁷ / 2560 x 1440 / 1920 x 1080 / 1280 x 720 / 640 x 360 / 320 x 180
		1.264/JPEG (MJPEG)	[4:3 mode] 3072 x 2304*7 / 2560 x 1920 / 1280 x 960 / 800 x 600 / VGA / 400 x 300 / QVGA
		Transmission Mode	
	H 264*8	Transmission Type	Unicast port (AUTO)/ Unicast port (MANUAL)/ Multicast
		Image Quality	Griedat port (1616), Griedat port (WATONE), Walticast

- *2 The frame rate is limited to 15 fps for level 30 or higher. The dynamic range is 108 dB typ / 30 fps for level 29 or lower.

- 2 The internate is millimeted to 1) give lives you finglet. The dynamic largets in to but by 7 so ips for level 29 of lower.
 390° and 270° are invalid only in the 320x180 resolution.

 4 Following the setting angle of the rotated image, the analog output of the MONITOR OUT terminal rotates.

 5 Maximum distance at which a camera's tele and wide lens can meet DORI specifications. This value does not indicate the performance of the camera. Calculations made with the camera installed horizontally at resolution of 3072 x 1728.
- *6 H.265/H.264 can be selected for each stream.
- *7 Camera uses Super resolution techniques. Super resolution techniques are techniques that enhance the resolution of an image.
 *8 Transmission for 4 streams can be individually set.

Notwork	Smart Coding	GOP (Group of pictures) control :
Network	Smart Couling	On (Frame rate control)* / On (Advanced)* / On (Mid) / On (Low) / Off
		*On (Frame rate control) and On (Advanced) are only available with H.265.
		Auto VIQS : On / Off
	Audio Compression	G.726 (ADPCM): 16 kbps / 32 kbps , G.711: 64 kbps
	Addio Compression	AAC-LC'9 : 64 kbps / 96 kbps / 128 kbps
	Audio transmission mode	Off / Mic (Line) input / Audio output / Interactive (Half duplex) /
	Addio transmission mode	Interactive (Full duplex)
	Supported Protocol	IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, SMTP, DNS, NTP, SNMP, DHCPv6, RTP, MLD,
		ICMP, ARP, IEEE 802.1X, DiffServ, SSL/TLS*10 , SRTP*10, SFTP*10, MQTT*10, LLDP*10
		IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP,
		SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP,
		ARP, IEEE 802.1X, DiffServ, SSL/TLS*10, SRTP*10, SFTP*10, MQTT*10, LLDP*10
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)
	SDXC/SDHC/SD	H.265 / H.264 recording :
	Memory Card	Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure
	,	JPEG recording : Manual REC / Alarm REC (Pre/Post)
		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, SCD alarm, Command alarm
	Alarm Actions	SDXC/SDHC/SD memory recording, E-mail notification,
		HTTP alarm notification, Indication on browser,
		TCP alarm notification output
Input/	Monitor Output	VBS : 1.0 V [p-p] / 75 Ω, composite, Pin jack
Output	(for adjustment)	An NTSC or PAL signal can be outputted from camera
	Audio input	ø3.5 mm stereo mini jack
	For microphone input :	Recommended applicable microphone : Plug-in power type
		(Sensitivity of microphone : -48 dB±3 dB (0 dB=1 V/Pa, 1 kHz))
		Input impedance : Approx. 2 kΩ (unbalanced)
		Supply voltage: 2.5 V ±0.5 V
	For line input :	Input level : Approx. –10 dBV
	Audio Output *11	ø3.5 mm stereo mini jack (Audio output is monaural.)
		Output impedance : Approx. 600 Ω (unbalanced)
		Output level : -20 dBV
	External I/O Terminals	ALARM IN 1(Alarm input 1/ Black & white input/ Auto time adjustment input) (x1),
		ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1), ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)
General	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	DC power supply : DC 12 V 930 mA/Approx. 11.2 W
	Power Consumption	PoE (IEEE802.3af compliant) Device : DC48 V 240 mA/Approx. 11.5 W (Class 0 device)
	Ambient Operating	-40 °C to +60 °C (-40 °F to +140 °F)*12
		(Payer On range : 20 °C to : 60 °C (22 °E to : 140 °E))
	Temperature	(Power On range : -30 °C to +60 °C {-22 °F to +140 °F})
	Temperature Ambient Operating Humidity	10 to 100 % (no condensation)
	Ambient Operating Humidity	10 to 100 % (no condensation)
	Ambient Operating Humidity Dehumidification Device	10 to 100 % (no condensation) Temish element+Fan/Heater
	Ambient Operating Humidity Dehumidification Device Water and Dust Resistance	10 to 100 % (no condensation) Temish element+Fan/Heater IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant
	Ambient Operating Humidity Dehumidification Device Water and Dust Resistance Shock Resistance	10 to 100 % (no condensation) Temish element+Fan/Heater IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC 62262)
	Ambient Operating Humidity Dehumidification Device Water and Dust Resistance Shock Resistance Wind Resistance	10 to 100 % (no condensation) Temish element+Fan/Heater IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC 62262) Up to 40 m/s {approx. 89 mph}
	Ambient Operating Humidity Dehumidification Device Water and Dust Resistance Shock Resistance Wind Resistance	10 to 100 % (no condensation) Temish element+Fan/Heater IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC 62262) Up to 40 m/s {approx. 89 mph} With adapter box : 133 mm (W) x 133 mm (H) x 377 mm (L)
	Ambient Operating Humidity Dehumidification Device Water and Dust Resistance Shock Resistance Wind Resistance	10 to 100 % (no condensation) Temish element+Fan/Heater [P66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC 62262) Up to 40 m/s (approx. 89 mph) With adapter box : 133 mm (W) x 133 mm (H) x 377 mm (L) (5-1/4 inches(W) x 5-1/4 inches(H) x 14-27/32 inches(L))
	Ambient Operating Humidity Dehumidification Device Water and Dust Resistance Shock Resistance Wind Resistance	10 to 100 % (no condensation) Temish element+Fan/Heater IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IR10 (IEC 62262) Up to 40 m/s (approx. 89 mph) With adapter box : 133 mm (W) x 133 mm (H) x 377 mm (L) (5-1/4 inches(W) x 5-1/4 inches(H) x 14-27/32 inches(L)) Without adapter box : 130 mm (W) x 130 mm (H) x 337 mm (L)
	Ambient Operating Humidity Dehumidification Device Water and Dust Resistance Shock Resistance Wind Resistance Dimensions	10 to 100 % (no condensation) Temish element+Fan/Heater IP66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC 62262) Up to 40 m/s (approx. 89 mph) With adapter box : 133 mm (W) x 133 mm (H) x 377 mm (L) (5-1/4 inches(W) x 5-1/4 inches(H) x 14-27/32 inches(L)) Without adapter box : 130 mm (W) x 130 mm (H) x 337 mm (L) (5-1/8 inches(W) x 5-1/8 inches(H) x 13-9/32 inches(L))
	Ambient Operating Humidity Dehumidification Device Water and Dust Resistance Shock Resistance Wind Resistance Dimensions	10 to 100 % (no condensation) Temish element+Farn/Heater [P66 (IEC60529), Type 4X (UL50E), NEMA 4X compliant IK10 (IEC 62262) Up to 40 m/s [approx. 89 mph] With adapter box : 133 mm (W) x 133 mm (H) x 377 mm (L) (5-1/4 inches(W) x 5-1/4 inches(H) x 14-27/32 inches(L)) Without adapter box : 130 mm (W) x 130 mm (H) x 337 mm (L) (5-1/8 inches(W) x 5-1/8 inches(H) x 13-9/32 inches(L)) With adapter box : 2.2 kg (4.85 lbs)
	Ambient Operating Humidity Dehumidification Device Water and Dust Resistance Shock Resistance Wind Resistance Dimensions Mass	10 to 100 % (no condensation) Temish element+Fan/Heater IP66 (IEC60529). Type 4X (UL50E), NEMA 4X compliant IK10 (IEC 62262) Up to 40 m/s (approx. 89 mph) With adapter box : 133 mm (W) x 133 mm (H) x 377 mm (L) (5-1/4 inches(W) x 5-1/4 inches(H) x 14-27/32 inches(L)} Without adapter box : 130 mm (W) x 130 mm (H) x 337 mm (L) (5-1/8 inches(W) x 5-1/8 inches(H) x 13-9/32 inches(L)) With adapter box : 2.2 kg (4.85 lbs) Without adapter box : 1.7 kg (3.75 lbs)

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

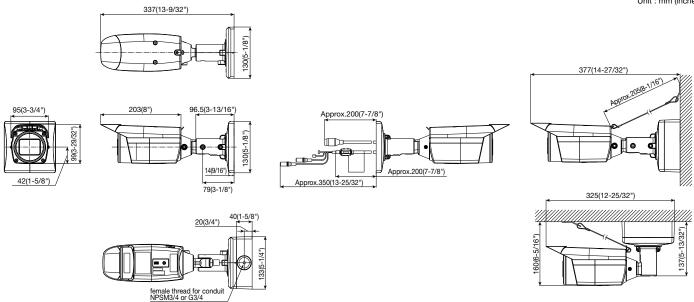
 *10 It may be necessary to upgrade the firmware to use these protocols

 *11 The audio output can be switched to the monitor output. Refer to the Operating Instructions on the our support
 web site for descriptions of how to switch the output.

 *12 When using with the IR LED light constantly lit, the upper limit of the operating temperature range is +50 °C (+122 °F).

Appearance

Unit: mm (inches)



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,

Object Detection, Cross Line Detection



Notification sent to the monitoring screen

Optional Accessories

■ Mount Bracket

*For indoor

Ceiling Mount Bracket WV-QCL100-W (i-PRO white)







Corner Mount Bracket



•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.

Trademarks and registered trademarks

- iPad and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries.
 Android is a trademark of Google LLC.
- ONVIF is a trademark of ONVIF. Inc.
- All other trademarks identified herein are the property of their respective owners.

Important

- Safety Precautions : Carefully read the Basic Information, Installation Guide and Operating Instructions before using this product.

 - i-PRO Co., Ltd. cannot be held 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.

