

# WV-S25500-V3L WV-S25500-V3LG

# New S-series wide lineup high resolution network camera with AI engine

# **5MP Vandal Resistant Outdoor Dome Network Camera**

Equipped with an AI processor, it can run up to three AI analytics applications (AI apps) simultaneously, which significantly improve the detection rate of people and vehicles and can be used in a wide range of surveillance scenes. It realizes high-quality and clearer images even in low-light and wide-range shooting scenes.

# 3 AI Apps operation at same time

- Up to 3 Al apps can be operated at the same time from the wide variety.
 Using Al processor which identifies object as people or vehicle, it will reduce false alarm compared to conventional model.
 As result, it can be used many industries.

# High image quality / High compression

- Our original smart coding technology compatible with H.264 and H.265 delivers high-resolution video at high image quality and low bit rate. Achieved useful images by combining with highly visible images by the intelligent auto (iA) function.

# Easy setting and installation

- Easy Kitting Package enabling installers to configure cameras easily while keeping the unit in the box.\*

  The grommet on the outdoor model can reduce the time and effort required for installation.
- User-friendly GUI (setting while watching Live view, etc.) allows you to set comfortably.

iCT tool allows you to set multiple cameras, apps, and recorders all at once, reducing the camera setting time.

\*The kitting process should be done within 1hour. The inside of the camera gets hot and may cause a malfunction.

# **High security**

- Equipped with FIPS 140-2 level 3 certified hardware in addition to the digital certificate issued by a third party organization (GlobalSign®).

## Key i-PRO Spec.

- 5MP
- Intelligent Auto (with AI Engine)
- Super Dynamic 132dB
- Color night vision (0.05 to 0.07 lx)
   (-V3LG: 0.15 to 0.20 lx)
- Smart Coding (with Al Engine)
- Built-in IR LED
- 50J, IK10 Vandal Resistant
- ONVIF® Profile G / M / S / T \*ONVIF is a trademark of ONVIF, Inc.
- FIPS 140-2 level3 certified

## **Industry examples**

- Safe Cities
- Transportation (Airport / Train, Subway station)
- Bank (ATM, Entrance)
- Retail / Logistics / Education / Hospital / Building





WV-S25500-V3LG (Smoke Dome)



### Specifications

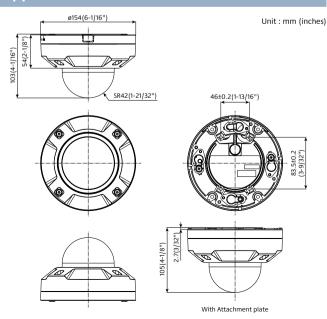
Camera	I C	4 1/2 8 b CMOS :			
Camera	Image Sensor Minimum Illumination	Approx. 1/2.8 type CMOS image sensor  Color: 0.05 lx (-V3LG: 0.15 lx) (30IRE, F1.3, 1/30s) *1			
	Minimum illumination				
		Color: 0.07 lx (-V3LG: 0.20 lx) (50IRE, F1.3, 1/30s)			
		BW: 0.04 ix (-V3LG: 0.12 ix) (50IRE, F1.3, 1/30s) BW: 0 ix (50IRE, F1.3, 1/30s with IR LED)			
	and the Bolt				
	White Balance	ATW1 / ATW2 / AWC			
	Shutter Speed	[30 fps/15 fps mode] 1/30 Fix to 1/10000 Fix			
		[25 fps/12.5 fps mode] 1/25 Fix to 1/10000 Fix			
	Intelligent Auto	On / Off			
	Super Dynamic	On / Off, The level can be set in the range of 0 to 31.			
	Dynamic Range	Max.132 dB (Super Dynamic : On, Level 31)			
	Adaptive Black Stretch	The level can be set in the range of 0 to 255.			
	Back light compensation /	BLC (Back light compensation) / HLC (High light compensation) / Off			
	High light compensation	(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 :			
		55 m {Approx. 180 ft} (G: 35 m{Approx.115 ft}) (30IRE) *1			
		40 m {Approx. 131 ft} (G: 25 m{Approx.82 ft}) (50IRE)			
	Digital Noise Reduction	The level can be set in the range of 0 to 255.			
	Video Motion Detection (VMD)				
	Scene Change Detection (SCD)	On / Off, 1 areas available			
	Audio Detection	On / Off			
	Al Sound Classification	Gunshot, Yell, Vehicle horn, Glass break			
	Al Analytics	Yes			
	Privacy Zone	On / Off, Up to 8 zones available			
	VIQS	On / Off, Up to 8 zones available			
	Image rotation*2	0° / 90° / 180° / 270°			
	Camera Title (OSD)	On / Off, Up to 40 characters (alphanumeric characters, marks)			
	Focus Adjustment	Auto focus			
Lens	Optical zoom	3.1x (Motorized zoom / Motorized Focus)			
	Extra zoom	3.1x - 9.3x (when resolution is 640 x 360)			
	Focal length	2.9 - 9 mm {1/8 inches - 11/32 inches}			
	Angular Field of View	[16 : 9 mode]			
		Horizontal: 33° (TELE) – 103° (WIDE), Vertical: 19° (TELE) – 55° (WIDE)			
		[ 4:3 mode]			
		Horizontal : 33° (TELE) – 103° (WIDE), Vertical : 25° (TELE) – 75° (WIDE)			
	Maximum Aperture Ratio	1:1.3 (WIDE) -1:2.5 (TELE)			
	Focus range	0.3 m {11-13/16 inches} - ∞			
DORI	Detect (25ppm / 8ppf)	Wide: 48.9 m / 160.3 ft, Tele: 207.4 m / 680.5 ft			
	Observe (62.5ppm / 19ppf)	Wide: 19.5 m / 64.1 ft, Tele: 83.0 m / 272.2 ft			
	Recognize (125ppm / 38ppf)	Wide: 9.8 m / 32.1 ft, Tele: 41.5 m / 136.1 ft			
	Identify (250ppm / 76ppf)	Wide: 4.9 m / 16.0 ft, Tele: 20.7 m / 68.1 ft			
System o	on Chip (SoC)	Ambarella CV22			
Adimet'-	g Angle	Horizontal : -194 to +166°, Vertical : -30 to +85°, Yaw : ±100°			
nujustin					
	Camera Control	Brightness, AUX On / Off			
Browser					
Browser	Camera Control	Brightness, AUX On / Off Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High			
Browser	Camera Control Audio	Brightness, AUX On / Off Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High Audio Output : On / Off Volume adjustment: Low / Middle / High			
Browser	Camera Control	Brightness, AUX On / Off  Mic (Line) Input: On / Off  Volume adjustment: Low / Middle / High  Audio Output : On / Off  Volume adjustment: Low / Middle / High  English, Italian, French, German. Spanish, Portuguese, Russian, Chinese, Japanese			
Browser GUI	Camera Control Audio GUI / Setup Menu Language Browser*3	Brightness, AUX On / Off  Mic (Line) Input: On / Off  Volume adjustment: Low / Middle / High  Audio Output : On / Off  Volume adjustment: Low / Middle / High  English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese  Microsoft Edge, Firefox, Google Chrome			
Browser GUI	Camera Control Audio GUI / Setup Menu Language Browser' <sup>3</sup> Network IF	Brightness, AUX On / Off Mic (Line) Input: On / Off Volume adjustment: Low / Middle / High Audio Output : On / Off Volume adjustment: Low / Middle / High English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese Microsoft Edge, Firefox, Google Chrome  10Base-T / 100Base-TX, RJ45 connector			
Browser GUI	Camera Control Audio GUI / Setup Menu Language Browser' <sup>3</sup> Network IF Resolution	Brightness, AUX On / Off  Mic (Line) Input: On / Off  Volume adjustment: Low / Middle / High  Audio Output: On / Off  Volume adjustment: Low / Middle / High  English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese  Microsoft Edge, Firefox, Google Chrome  10Base-T / 100Base-TX, RJ45 connector  [16:9 mode (30 fps mode)][16:9 mode (25 fps mode)]			
Adjusting Browser GUI Network	Camera Control Audio GUI / Setup Menu Language Browser' <sup>3</sup> Network IF	Brightness, AUX On / Off  Mic (Line) Input: On / Off  Volume adjustment: Low / Middle / High  Audio Output : On / Off  Volume adjustment: Low / Middle / High  English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese  Microsoft Edge, Firefox, Google Chrome  10Base-T / 100Base-TX, R145 connector  [16:9 mode (30 fps mode)] [16:9 mode (25 fps mode)]  3072x1728*4 / 2560x1440 / 1920x1080 / 1280x720 / 640x360 / 320x180			
Browser GUI	Camera Control Audio GUI / Setup Menu Language Browser' <sup>3</sup> Network IF Resolution	Brightness, AUX On / Off  Mic (Line) Input: On / Off  Volume adjustment: Low / Middle / High  Audio Output : On / Off  Volume adjustment: Low / Middle / High  English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese  Microsoft Edge, Firefox, Google Chrome  10Base-T / 100Base-TX, RI45 connector  [16:9 mode (30 fps mode)][16:9 mode (25 fps mode)]  3072x1728*4 / 2560x1440 / 1920x1080 / 1280x720 / 640x360 / 320x180  [4:3 mode (30 fps mode)][4:3 mode (25 fps mode)]			
Browser GUI	Camera Control Audio GUI / Setup Menu Language Browser'3 Network IF Resolution H.265/ H.264/ JPEG (MJPEG)	Brightness, AUX On / Off  Mic (Line) Input: On / Off  Volume adjustment: Low / Middle / High  Audio Output: On / Off  Volume adjustment: Low / Middle / High  English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese  Microsoft Edge, Firefox, Google Chrome  108ase-T / 1008ase-TX, 1445 connector  [16:9 mode (30 fps mode)][16:9 mode (25 fps mode)]  3072x1728*4 / 2560x1440 / 1920x1080 / 1280x720 / 640x360 / 320x180  [4:3 mode (30 fps mode)][4:3 mode (25 fps mode)]  3072x2304*4 / 2560x1920 / 1280x960 / 800x600 / VoA / 400x300 / 320x240			
Browser GUI	Camera Control Audio GUI / Setup Menu Language Browser' <sup>3</sup> Network IF Resolution	Brightness, AUX On / Off  Mic (Line) Input: On / Off  Volume adjustment: Low / Middle / High  Audio Output : On / Off  Volume adjustment: Low / Middle / High  English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese  Microsoft Edge, Firefox, Google Chrome  10Base-T / 100Base-TX, RI45 connector  [16:9 mode (30 fps mode)][16:9 mode (25 fps mode)]  3072x1728*4 / 2560x1440 / 1920x1080 / 1280x720 / 640x360 / 320x180  [4:3 mode (30 fps mode)][4:3 mode (25 fps mode)]			

<sup>\*1</sup> Converted value

#### Jetwork Smart Coding GOP (Group of pictures) control: Off/ Low (Variable GOP 1s-8s) / Mid (Variable GOP 4s-16s) / Advanced (Fixed GOP 60s w/1s key-frame) / Frame rate control (Variable GOP 4s-16s with frame rate control) \*Advanced and Frame rate control are only available with H.265 Smart VIQS: On (High) / On (Low) / Off, Smart P-picture control: On / Off Audio Compression G.726 (ADPCM) : 16 kbps / 32 kbps : 64 kbps AAC-LC\*6 : 64 kbps / 96 kbps / 128 kbps Off / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex) | IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, SMTP, DNS, NTP, SNMPv1/v2/v3, Audio transmission mode DHCPv6, RTP, MLD, ICMP, ARP, IEEE 802.1X, DiffServ, SFTP, MQTT, LLDP IPv4 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP, DHCP, DNS, DDNS, NTP, SNMPv1/v2/v3, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, SFTP, MQTT, LLDP No. of Simultaneous Users Up to 14 users (Depends on network conditions) FIPS 140-2 level3 SDXC/SDHC/SD 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 : microSDXC memory card : 64 GB, 128 GB, 256 GB, 512 GB microSDHC memory card: 4 GB, 8 GB, 16 GB, 32 GB microSD memory card : 2 GB Mobile Terminal Compatibility iPad, iPhone(iOS 8.0 or later), Android™ terminals ONVIF® Profile G / M / S / T terminals input, VMD alarm, Command alarm, Audio detection alarm 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 (for adjustment) Audio input\*7 An NTSC or PAL signal can be outputted from camera ø3.5 mm stereo mini iack For microphone input Recommended applicable microphone : Plug-in power type (Sensitivity of microphone : -51 dB to -38 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\*7 ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 $\Omega$ (unbalanced) Output level : -20 dBV External I/O Terminals\*7 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 UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1 General Safety FCC (Part15 ClassA), ICES-003 ClassA, EN55032 ClassA, EN55035 Power Source and DC power supply 7: DC12 V 1.0 A, Approx. 12.0 W POE (IEEE802.3af compliant) Device : DC48 V 240 mA, Approx. 11.5 W (Class 0 device) Power Consumption Ambient Operating -40 °C to +60 °C (-40 °F to 140 °F)\*8 (Power On range : -30 °C to +60 °C {-22 °F to +140 °F}) Temperature Ambient Operating Humidity 10 to 100 % (no condensation) Temish element + Heater + moisture absorption gel Anti-Condensation System Water and Dust Resistance IP66, IEC60529 measuring standard compatible, Type 4X(UL50E), NEMA 4X compliant Shock Resistance 50J (IEC 60068-2-75 compliant), IK10 (IEC62262) ø154 mm x 105 mm (H) {ø6-1/16 inches x 4-1/8 inches (H)} Mass (approx.) Approx. 1.1 kg {2.43 lbs.} Main body : Aluminum die cast, i-PRO white Outer fixing screws: Stainless steel (Corrosion-resistant treatment)

Dome section: Polycarbonate resin, Clear (G: Smoke)

### **Appearance**



# Al Analytics applications

https://i-pro.com/global/en/surveillance/products/i-pro-ai-application

#### Al Video Motion Detection (Al-VMD)

Advanced video analysis technology detects objects (faces, people, cars, motorcycles) in a specified area. (Intruder Detection, Loitering Detection, Direction Detection, Cross Line Detection)

To protect privacy and portrait rights, it is possible to automatically apply a mosaic the entire face and figure of a person photographed by the camera.

### **AI Face Detection**

Detects faces with high precision even in low-light, backlit, and mask-wearing environments.

#### Al People Detection

Extract the characteristics of human face / clothing and classify them into meaningful categories such as gender, age, and clothing color.

#### **AI Vehicle Detection**

Extract vehicle characteristics and classify them into meaningful categories such as type and color.

#### Al Non mask Detection

Deep-learning and proprietary image processing technologies recognize mask and detect people who are not wearing them.

#### Al Occupancy Detection

Detecting the congestion via network camera with AI engine enables that information to be used direct visitors in advance or help store staff work more efficiently.

https://i-pro.com/global/en/surveillance/i-pro-application-platform/application-list

<sup>\*2</sup> When the 320x180 resolution is used, the "90°" and "270°" settings are not available.

<sup>\*3</sup> For information on the operation verification of the supported web browsers, refer to our support website <Control No.: C0132>.

<sup>\*4</sup> Used by super resolution techniques
\*5 Transmission for 4 streams can be individually set.

<sup>\*6</sup> When recording audio on an microSD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity).

<sup>\*7</sup> When using with these, WV-OCA501A cable is required.

<sup>\*8</sup> When using with the IR LED light constantly lit, the upper limit of the operating temperature range is +50 °C {+122 °F}.

## **Optional Accessories**

#### Mount Bracket / Other

	WALL				POLE	CORNER		
combination	1	2	3	1	2	1	2	
	Wall Mount Bracket PWM485W (White) W-QWL500-W (White) Sun Shade WV-QSR500-W (White) William (White) White)		Pole Mount Bracket PAPM4W (White)		Corner Mount Bracket PACA4W (White)			
	Conduit Adapter PAPM6 (Black)	Adapter Box WV-QJB500-W (White)	Base Bracket WV-QJB501-W (White)	Wall Mount Bracket PWM485W (White)	Wall Mount Bracket WV-QWL500-W(White) (+ WV-QJB500-W)	Wall Mount Bracket PWM485W (White)	Wall Mount Bracket WV-QWL500-W(White) (+ WV-QJB500-W)	

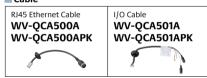
		HANGING		PARAPET	CEILING		
combination	1	2	3	1	1	2	3
	Ceiling Mount Bracket WV-QCL501-W (White)	Ceiling Mount Bracket WV-QCL101-W (White)  *For indoor instalation only.	Ceiling Mount Bracket WV-QCL101-W *1 (White) *For indoor instalation only.	Parapet Mount Bracket <b>PPRM35W</b> (White)	Ceiling Mount Bracket (Embedded) WV-QEM500-W (White)	Base Bracket WV-QJB501-W (White)	Ceiling Mount Bracket WV-Q105A  *For indoor instalation only.
	Mount Bracket WV-QSR501-W (White)	Mount Bracket <b>PS485W</b> (White)	This bracket requires 1 ½" NPT pipe.	Mount Bracket <b>PS485W</b> (White)			

<sup>\*1:</sup> It's possible to be used on the camera side and ceiling side. If used on both side, 2pieces are required.

#### Dome Cover







- \*WV-QCA500APK and WV-QCA501APK are package of 10 cables.
- \*The color of the grommet rubber may differ depending on the production time, but the performance and mounting method will not change.

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- 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.

