

## Extreme performance - under - Extreme conditions

The **AeroPTZ** is an environmentally rugged camera designed to meet extreme weather conditions.

Using the latest aerodynamic technology and salt-air corrosion resistant glass fiber body, the **AeroPTZ** can withstand the beating from tropical storms, extreme hot and cold temperatures, and gale-force winds.

Additionally, a unique i-PRO Video Stability Augment System (SAS) delivers superior, high-class hybrid image stabilization for extreme scenes with vibration.

Making the **AeroPTZ** well-suited for ports, cities, highway, transit, airports and other outdoor mission critical environments where failure is not an option.

### Key Features

- Full HD (1080p) 60fps, 30x zoom lens
- **Built-in wiper and Auto defroster**
- Wind load durability **216 km/h (135 mph)\*** (operation)  
**288 km/h (180 mph)** (non-destructive)  
\* Upright position
- **Video SAS (Stability Augment System)**  
for high-class image stabilization
- “Sphere vision” provides **360° 3D viewing**  
(Pan : 360° endless, tilt : 90° to -90°)
- Temperature **-50 °C to +60 °C (-58 °F to +140 °F)\***  
\* Natural Silver model only. Not available IR LED Unit when the temperature is over 55 °C (131 °F).  
Gray & Brown model : up to +55 °C (131 °F).
- **IP67, IP66, IK10 certified**
- **Optional IR LED light** (up to **150 m/500 feet**, zoom interlocking)
- **Anti-salt air corrosion protection** ideal  
for seaside operations
- **Smart Coding mode**  
for additional compression



WV-SUD638 (Natural Silver)  
WV-SUD638-H (Gray)  
WV-SUD638-T (Brown)

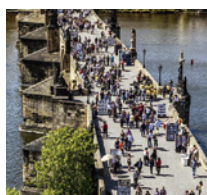


IR LED Unit : Optional  
WV-SUD6FRL1 (Natural Silver)  
WV-SUD6FRL-H (Gray)  
WV-SUD6FRL-T (Brown)



\*ONVIF is a trademark of ONVIF, Inc.

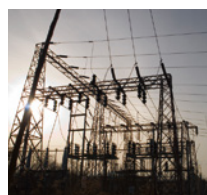
### Industry examples



Safe city



Port facility



Critical Infrastructure



Airport



Railway



Traffic

Notice : Do not install this product in locations subject to continuous or large vibration. Failure to observe this may cause a drop resulting in injury or accident.

## Specifications

Camera	Image sensor	Approx. 1/3 type MOS image sensor
	Minimum illumination	Color : 0.06 lx (F1.6, Maximum shutter : Off(1/30 s), AGC : High) 0.004 lx (F1.6, Maximum shutter : max. 16/30 s, AGC : High)* BW : 0.02 lx (F1.6, Maximum shutter : Off(1/30 s), AGC : High) 0.001 lx (F1.6, Maximum shutter : max. 16/30 s, AGC : High)* 0 lx (F1.6, Maximum shutter : Off(1/30 s), AGC : High, when the IR LED (Optional) is lit) * Converted value
	Super Dynamic*1	Dynamic Range 105 dB typ.
	Image settings	Gain (AGC), White balance
	Image compensation	Adaptive black stretch, Back light compensation (BLC), Fog compensation, High light compensation (HLC), Digital noise reduction
	Shutter speed	[2 mega pixel [16 : 9] (60 fps mode)] Off(1/60) to 1/10000 Other than [2 mega pixel [16 : 9] (60 fps mode)] Off(1/30) to 1/10000
	Day/Night (ICR)	Off / On / Auto1(Normal) / Auto2(IR Light) / Auto3(SCC)
	IR LED Light (Optional)	Off / Auto (High / Mid / Low) irradiation distance : 150 m (500 feet)
	Image stabilization	On / Off *Hybrid image stabilizer
	Privacy zone	Gray / Mosaic / Off (up to 32 zones available)
	Camera title on screen	Up to 20 characters (alphanumeric characters, marks)
	Video Motion Detection (VMD)	On / Off, 4 areas available
Lens	Zoom Ratio	30x / 45x with HD extra optical zoom (at 1280 x 720) (Motorized zoom / Auto Focus)
	Digital (electronic) zoom	x1, x2, x4
	Focal length	4.3 mm - 129 mm [3/16 inches - 5-3/32 inches]
	Maximum Ratio Aperture	1 : 1.6 (WIDE) - 1 : 4.7 (TELE)
	Focus range	2.0 m - ∞
	Aperture range	F1.6 (WIDE) - Close
	Angular field of view	[16 : 9 mode] Horizontal : 2.3° (TELE) - 64° (WIDE) Vertical : 1.3° (TELE) - 38° (WIDE) [4 : 3 mode] Horizontal : 1.8° (TELE) - 50° (WIDE) Vertical : 1.3° (TELE) - 38° (WIDE)
Pan/tilt unit	Panning Range	360° endless
	Panning Speed	Manual : approx. 0.065°/s to 100°/s Preset : up to approx. 200°/s (Except when IR LED Unit is equipped, forward tilt mount, frozen.)
	Tilting Range	Upright : -45° to +90° Forward tilt : -90° to +90° Hanging : -90° to +30°
	Tilting Speed	Manual : approx. 0.065°/s to 100°/s Preset : up to approx. 200°/s (Except when IR LED Unit is equipped, forward tilt mount, frozen.)
	Preset Positions	256 positions
	Auto Mode	Auto track / Auto pan / Preset sequence / 360 map-shot / Preset map-shot / Patrol
	Self Return	10 s to 60 min
	Tilt flip	On / Off
	Map Shot	360° map shot / preset map shot
	Network IF	10Base-T / 100Base-TX, RJ45 connector
	Image Resolution	<b>*2 mega pixel [16 : 9] (60 fps mode / 30 fps mode)</b> H.264 : Maximum 1,920 x 1080 JPEG : Maximum 1,920 x 1080
	H.264	
Network	JPEG (MJPEG)	<b>*1.3 mega pixel [4 : 3] (30 fps mode)</b> H.264 : Maximum 1,280 x 960 JPEG : Maximum 1,280 x 960
	Image compression method	H.264 Transmission Mode : Constant bit rate / Variable bit rate / Frame rate priority / Best effort / Advanced VBR Transmission type : Unicast / Multicast JPEG Image Quality : 10 steps Multiple streams individually configurable
	Intelligent compression	Smart coding, VIQS (ROI)
	Audio compression	G.726 (ADPCM) : 16 kbps / 32 kbps G.711 : 64 kbps AAC-LC <sup>2</sup> : 64 kbps, AAC-LC(High quality) <sup>2</sup> : 64 kbps / 96 kbps / 128 kbps
	Protocol	IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, RTP, MLD, ICMP, ARP, DiffServ IPv4 : TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP, DiffServ
	Maximum concurrent access number	Up to 14 users (Depends on network conditions)
	Mobile terminal compatibility	iPad, iPhone, iPod touch (iOS 4.2.1 or later)
	(As of September, 2016)	Android™ mobile terminals

### 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.

### 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.

- Design and specifications are subject to change without notice.
- Masses and dimensions are approximate.

Environment	Water and Dust Resistance	Main body : IP66, IP67, IEC60529 measuring standard compatible, Type 4X(UL50), NEMA 4X compliant
		Waterproof RJ45 connector, Waterproof power connector, Waterproof I/O connector
	Shock resistance	Compliant with IK10 (IEC 62262)
	Vibration resistance	IEC60068-2-6 compliant
	Salt damage resistance	ISO14993 compliant
	Resistance to wind	Upright 216 km/h (135 mph) (Operation) / 288 km/h (180 mph) (non-destructive) Forward tilt 50 m (112 mph) (Operation) / 80 m (180 mph) (non-destructive)
General	Safety	UL (UL60950-1), c-UL (CSA C22.2 No.60950-1), CE, IEC60950-1
	EMC	FCC (Part15 ClassA), ICES003 ClassA, EN55032 ClassA, EN55024
	Power source	AC100 to 240 V, 50 Hz / 60 Hz Tested PoE Injector* (60 W) *with limitations
	Operating environment	Ambient operating temperature : AC100 to 240 V : -50 °C to +60 °C (-58 °F to 140 °F) (Power On range : -30 °C to +60 °C (-22 °F to 140 °F)) When using the tested PoE injector : -30 °C to +60 °C (-22 °F to 140 °F) When using the tested PoE injector and IR LED unit at the same time: -20 °C to +55 °C (-4 °F to 131 °F) *The upper limit value of ambient operating temperature indicates the use of WV-SUD638 (natural silver). In cases of products with other body colors, the upper limit value is +55 °C {131 °F}. *When WV-SUD6FRL1 (IR LED unit) is attached, the upper limit value of ambient operating temperature is +55 °C {131 °F}. Ambient operating humidity : 10 % to 100 %
	External I/O terminals	ALARM IN 1(DAY/NIGHT IN, Auto time adjustment), ALARM IN 2(ALARM OUT), ALARM IN 3(AUX OUT), Relay connection (x1 for each)
	line input	ø3.5 mm monaural mini jack Input impedance : Approx. 2 kΩ (unbalanced)
	For line input	Input level : Approx. -10 dBV
	Audio output	ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 Ω (unbalanced) Using Amplifier built-in external speaker Output level : -20 dBV
	Dimensions	220 mm (W) x 450 mm (H) x 266 mm (D) (8-21/32 inches (W) x 1ft 5-23/32 inches (H) x 10-15/32 inches (D))
	Mass (approx.)	Approx. 8.5 kg (18.7 lbs)
	Finish	Main body : Glass Fiber Reinforced Plastics WV-SUD638 : Natural Silver WV-SUD638-H : Gray (N7) WV-SUD638-T : Brown (Environmental color) Front glass : Glass, Clear

\*1 Super Dynamic function is automatically set off on 60 fps mode.

\*2 When "AAC-LC (HIGH QUALITY)" is selected, there are limitations about the following function.

- HTTPS is not available. - The maximum concurrent access number is limited to 5

\*3 Only when installation work specified in Installation Guide is properly performed and appropriate waterproof treatment is performed.

## Appearance

