

## 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, arctic blizzards, extreme hot and cold temperatures, and gale-force winds.

Additionally, a unique Panasonic 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) 60 fps, 30x zoom lens
- **Built-in wiper and Auto defroster**
- Wind load durability **60 m/s (135 mph)** (operation)  
**80 m/s (180 mph)** (non-destructive)
- **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.  
Gray & Brown model : up to +55 °C.
- **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)



### Industry examples



Safe city



Port facility



Critical Infrastructure



Airport



Railway



Traffic

## Specifications

<b>Camera</b>	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 (ICF)	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	
	<b>Lens</b>	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)	
<b>Pan/tilt unit</b>		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	
	<b>Network</b>	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 : Minimum 1,920 x 1080 JPEG (MJPEG)
		JPEG (MJPEG)	<b>•1.3 mega pixel [4 : 3] (30 fps mode)</b> H.264 : Minimum 1,280 x 960 JPEG : Minimum 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, VICS (ROI)	
Audio compression		G.726 (ADPCM) 32 kbps / 16 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 IPv4 : TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP	
Maximum concurrent access number		Up to 14 users (Depends on network conditions)	
Mobile terminal compatibility (As of September, 2016)		iPad, iPhone, iPod touch (iOS 4.2.1 or later) Android™ mobile terminals	

<b>Environment</b>	Water and Dust Resistance <sup>3</sup>	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)
	Salt damage resistance	ISO14993 compliant
	Resistance to wind	60 m (135 mph) (Operation) / 80 m (180 mph) (non-destructive)
<b>General</b>	Power source	AC100 to 240 V, 50 Hz / 60 Hz Tested PoE Injector (60 W) *with limitations
	Operating environment	Ambient operating temperature : -50 °C to +60 °C (-58 °F to 140 °F) (When using AC100 to 240 V) -30 °C to +60 °C (-22 °F to 140 °F) (When using tested PoE Injector) (Power on range : -30°C to +55 °C(-22 °F to 158 °F)) *Natural Silver model only. Not available IR LED Unit when the temperature is over 55 °C. Gray & Brown model : up to +55 °C. 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) 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 kg (17.64 lbs)
	Finish	Main body : High-strength resin of salt damage resistance WV-SUD638 : Natural Silver WV-SUD638-H : Gray (N7) WV-SUD638-T : Brown (Environmental color) Front glass : Glass, Clear

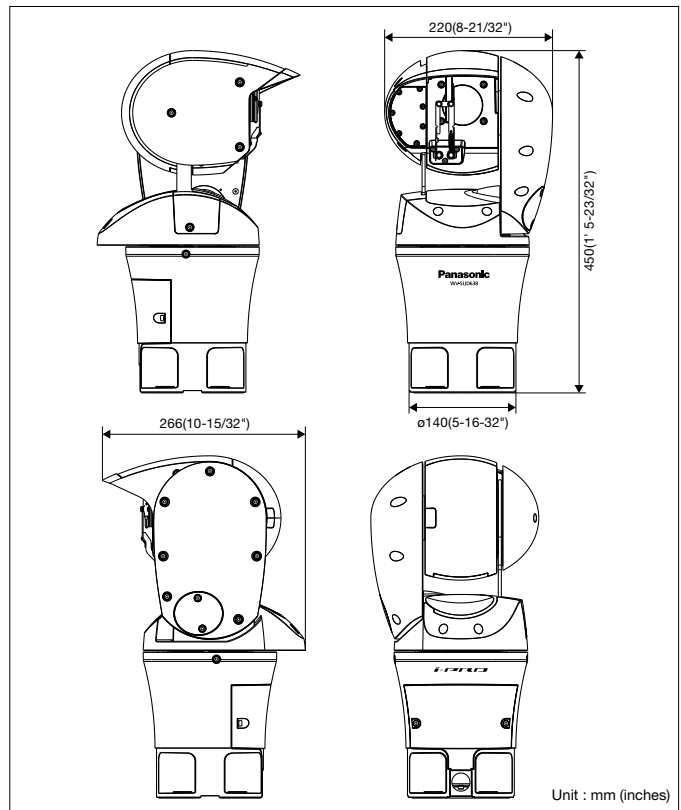
\*1 Super Dynamic function is automatically set off on 60 fps mode.

\*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



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- Design and specifications are subject to change without notice.
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