

SA1800 GNSS Antenna

GNSS Antenna  
for Reference Station



# SA1800 TECHNICAL FEATURES

## 3D CHOKE RING ANTENNA

The unique 3D choke ring design of SA1800 ensures an excellent multipath reduction performance across all GNSS frequency bands including L-Band. It is ideal for applications of CORS stations, bridge and building deformation monitoring or geological monitoring due to its sub-millimeter phase center stability.

## TRACKING EVERYWHERE

The strong ability to receive low elevation signals with high gain and wide beam width makes SA1800 an excellent choice for tracking visible satellites and provide stable and precision GNSS data under complex environments, such as obstructed environment of tree lines or construction.

## STRONG ANTI-INTERFERENCE PERFORMANCE

The antenna LNA features an excellent out-of-band rejection performance, which can suppress the EMI, providing the stability and reliability of GNSS signals. Also it effectively avoids disconnection dangerous when receivers are being interfered by wireless communication systems, for example power grid, communication base station or radio modem applications.

## RUGGED

The SA1800 cover is made of Glass Fiber Reinforced Polymer(GFRP) material and is structurally strong and reliable. The IP67 ruggedized cover is also designed for added protection for inside antenna avoid from dust and water.

### PERFORMANCE

Satellite Signal Tracked	GPS: L1, L2, L5
	GLONASS: L1, L2, L3
	BEIDOU: B1, B2, B3
	GALILEO: E1, E5a, E5b, E6, AltBOC
	QZSS: L1, L2, L5, L6
	IRNSS: L5
Type	SBAS: L1, L5
	L-BAND
Type	3D Choke Ring Antenna
Phase Center Stability	± 1mm
Nominal Impedance	50Ω
Polarization	RHCP
Axial Ratio	≤2dB
Peak Gain	7dB
LNA Gain	50dB (typical)
Noise Figure	≤2dB
Output/Input VSWR	≤2.0
Operation Voltage	+3.3VDC to +12VDC
Operation Current	60mA (maximum)
Group Delay Ripple	≤5ns

### MECHANICAL

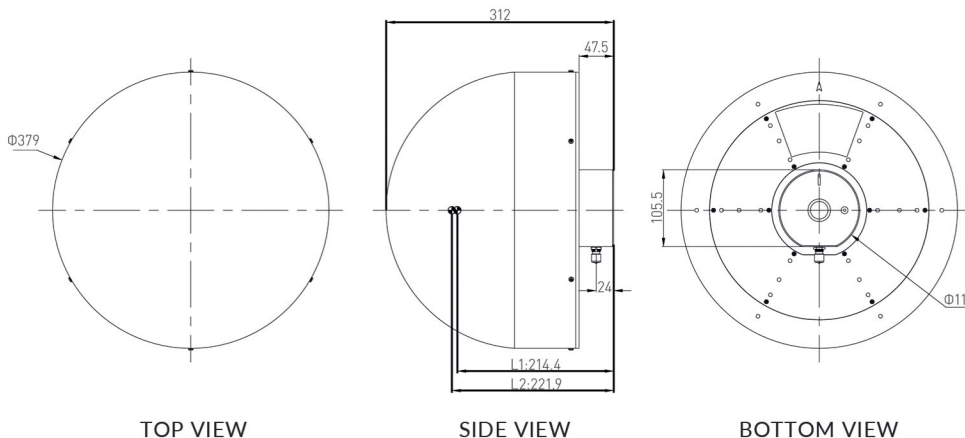
Dimensions	Ø379mm x 312mm
Connector	TNC female
Mounting	BSW 5/8"-11 screw, depth ≥22mm
Weight	10.5kg

### ENVIRONMENTAL

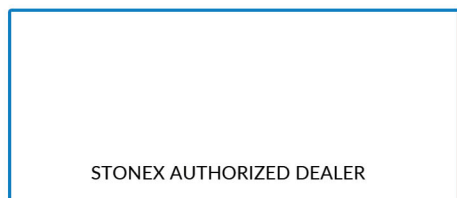
Operating Temperature	-45°C to 85°C (-49°F to 185°F)
Storage Temperature	-55°C to 85°C (-67°F to 185°F)
Humidity	95% non condensing
Waterproof/Dustproof	IP67

### CALIBRATION

NGS	Yes
IGS	Yes



Illustrations, descriptions and technical specifications are not binding and may change



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