

# GNSS-3SA

## GNSS Active Antenna

### KEY FEATURES

- Military and Civilian Applications
- GNSS Bands: GPS L1, L2; GLONASS L1, L2 and L3; GALILEO E1, E5b
- Waterproof
- Excellent gain
- Small Form Factor
- Integrated Resistor for Antenna/Coaxial Cable BIT
- Side Mount



### Automated Built In Test (BIT)

The GNSS Antenna includes BIT. The antenna can monitor the DC voltage on the center conductor to determine the status of the cable and antenna connection.

### DURABLE, HI PRECISION, BUILT TO LAST

The GNSS active antenna from GPS Source is built for long term reliability. The antenna is small and lightweight, with exceptional protection against the elements. It is suitable for manpack, ground, marine, aircraft, and space applications, multiple GPS devices and operating platforms.

Designed to future proof your investment, the portable, yet precise GNSS antenna will receive GPS, GLONASS and future Galileo signal. The ruggedized antenna, engineered with weather resistant materials, protects the antenna from UV, rain and lightning strikes, chemical and jet fuels - making it an ideal investment for long term use.

### DESIGNED TO THE FOLLOWING STANDARDS

- » Mechanical Vibration: 810G, Mtd 514.6, Proc. 1
- » Functional Shock: 810G, Mtd 516.6, Proc. 1
- » Crash Hazard: 810G, Mtd 516.6, Proc. V
- » High Temperature: 810G, Mtd 501.5, Proc. 1 & II
- » Low Temperature: 810G, Mtd 502.5, Proc. I & II
- » Temperature Shock: 810G, Mtd 503.5, Proc. I-C
- » Altitude: 810G, Mtd. 500.5, Proc. II & III
- » Humidity: 810G, Mtd 507.5, Proc. II
- » Salt Fog: 810G, Mtd 509.5
- » Fungus: 810G, Mtd 508.6
- » Sand and Dust: 810G, Mtd 510.5, Proc. 1 & II
- » Conducted Emissions: 461F, CE106
- » Radiated Emissions: 461F, RE102
- » Radiated Susceptibility: 461F, RS103

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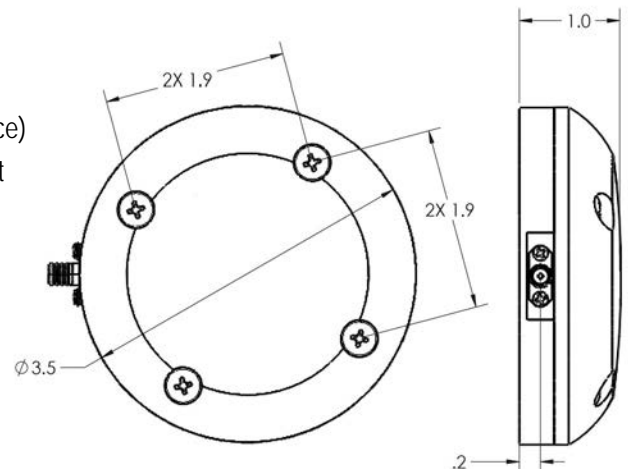
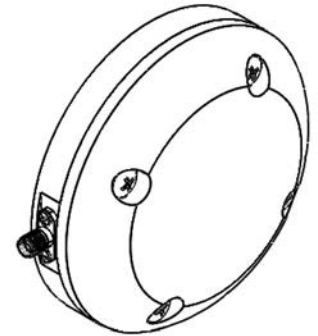
## GNSS Antenna

Frequency Range (Passband)	GNSS Upper Band	1575.42 MHz typical
	GNSS Lower Band	1227.6 MHz typical
Out Impedence		50Ω typical
Element Gain (Output = 50Ω, 4 ft G.P.)	GPS L1	>+3 dBiC min
	GPS L2	>+0 dBiC min
	GLONASS L1	>+3 dBiC min
	GLONASS L2	>-3 dBiC min
	GLONASS L3	>-5 dBiC min
	Galileo E1	>+3 dBiC min
	Galileo E5	>-3 dBiC min
	Galileo E5b	>+5 dBiC min
LNA Gain (Output = 50Ω)	GPS L1	>+30 dBm min
	GPS L2	>+30 dBm min
	GLONASS L1	>+30 dBm min
	GLONASS L2	>+30 dBm min
	GLONASS L3	>+30 dBm min
	Galileo E1	>+30 dBm min
	Galileo E5	>+30 dBm min
	Galileo E5b	>+30 dBm min
Axial Ratio at Peak		< 2.8 dB max
Output SWR		2:1 max
Polarization		Right Hand Circular
Required DC Input		3 - 12 VDC
Noise Figure		3.0 dB max
LNA OP1dB Compression		10dBm max
LNA OIP3		15dBm max
Beam Width		110 ±5° at -3dB from Peak (Free Space)
Lightning Protection		DC to Ground on the Antenna Element
Altitude		50,000 ft
Temperature		-54°C to 71°C

## GNSS Active Antenna

### Physical Specifications

Size	Diameter: 3.5" Height: .9"
Weight	9.44 oz
Base Finish	Iridite per Mil-C-5441
Connector	SMA(m,f)



## ABOUT US

GPS Source is an original equipment manufacturer (OEM) that designs, manufactures and sells high-precision GNSS/GPS technology for both Commercial & Defense Industries.

[www.gpssource.com](http://www.gpssource.com)