

GNSS-3A

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
- Bottom 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

GNSS-3A GNSS ACTIVE ANTENNA

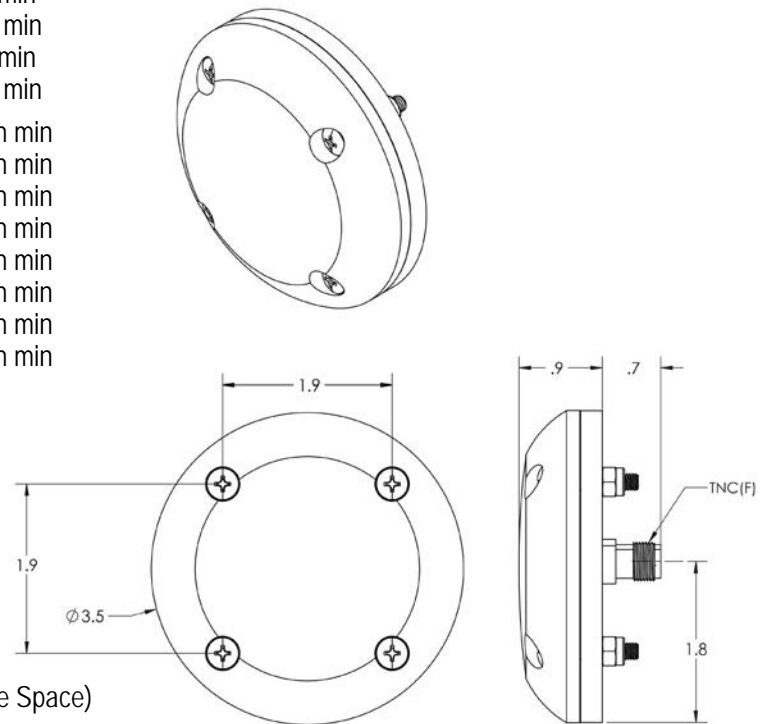
GNSS Antenna

| | | |
|---|-----------------|--|
| Frequency Range (Passband) | GNSS Upper Band | 1575.42 MHz typical |
| | GNSS Lower Band | 1227.6 MHz typical |
| Out Impedance | | 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), TNC(f), or N(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