

Instant Full L-Band coverage indoors **GNSS-L-BAND-12**

Full GNSS coverage

Roger-GPS full L-band repeater is an indoor solution to growing demand of true multi-band receivers which provides greater accuracy and more robust performance for Positioning, **Navigation and Timing (PNT).**

Application examples:

GPS's L5 signal was developed for aviation safety. It's the most advanced civilian signal available from GPS for its higher power and lower frequency. GNSS-L-BAND-12 can be used in aircraft hangars for testing aircraft positioning receiver equipments.

GALILEO Public Regulated Service (PRS), exclusively for authorized users. One is centered at E1 and the other at E6. E6 transmits correction data for high-accuracy services, typically to provide precise point positioning (PPP). E6 also provides a higher data rate, making it ideal for applications that require global, high-accuracy positioning. The PRS, which is protected against interference, jamming and spoofing, aims to provide secure and reliable position and timing information to public authorities and operators critical for the security of supply. GNSS-L-BAND-12 can be used indoors to provide signals where E1 and E6 signals are in use.

GALILEO's E5 signal is split into E5a and E5b. They can be used independently or together for higher accuracy. GNSS-L-BAND-12 can be used for testing E5 enabled devices.

GNSS Frequencies in L Band

E = Galileo

G = Glonass

Key features

- **Upper and Lower L-BAND**
- Automatic gain limitation
- Oscillation prevention with indicator
- Maximal coverage for CE approved
 - Sustaining GPS/GLONASS/GALILEO/ BEIDOU fix when moving from indoors to outdoors
 - Full product family with repeaters, amplifiers and splitters





L = GPS SAR - Galileo Downlink

Independent displays for Lower and Upper bands. Displays ease the installation, monitoring, and troubleshooting.

- **Antenna current monitoring**
- Radiated power indicator
- **Gain indicator**

Copyright Roger-GPS Ltd. ©

Aircraft hangars, PRS receivers, Workshops, Fire stations, Bus stations, Railway stations, etc.

How does Roger-GPS repeater work?

ROGER-GPS repeater operates by receiving satellite signals with an antenna located outside the building and re-radiating the signals to the indoor area or covered space.

Use of re-radiated signals indoors means that GPS/ GLONASS/GALILEO/BEIDOU receiver is tracking the current status and signal from the satellites. When a GPS/ GLONASS/GALILEO/BEIDOU receiver is moved from covered area to outdoors and vice versa, the receiver is instantly tracking the location instead of time consuming acquisition. Technical information





Frequency:

Size: Weight: Casing: Adjustable Gain: Impedance: Input antenna connector: Operating temperature: DC Supply voltage: **Device Current:** Indoor coverage: Antenna power output: TX Antenna gain:

GPS L1 (1.57542 GHz) GPS L2 (1.2276 GHz) GPS L5 (1.17645 GHz) GALILEO E1 (1.57542 GHz) GALILEO E5a (1.17645 GHz) GALILEO E5b (1.207140 GHz) GALILEO E6 (1.27875 GHz) GLONASS G1 (1.600995 GHz) GLONASS G2 (1.24806 GHz) GLONASS G3 (1.20714 GHz) BEIDOU B1 (1.15611 GHz) BEIDOU B2 (1.1890 GHz) BEIDOU B3 (1.26852 GHz) 220x121x63 mm 563 g **IP67** 9-40 db 50 Ohm **TNC-female** -25 - +55 °C +12VDC max 300mA upto 50 meters + 5 VDC, 100 mA max. +4dBd,



ROGER-GPS GNSS products:

Latest Product information can be found on http://www.gps-repeating.com/

or email us to

roger@gps-repeating.com



RHCP polarisized