

ROGER™ GNSS Repeater

GNSS-L-BAND-12

Full GNSS coverage

The GNSS-L-BAND-12 repeater is an indoor true multi-band solution providing greater accuracy and more robust performance for Positioning, Navigation and Timing (PNT). It covers the full L-Band frequencies in a single unit.

Key Features:

- GPS L1/L2/L5
- Galileo E1/E5/E6
- Glonass G1/G2/G3
- BeiDou B1/B2/B3
- Automatic gain limitation
- Oscillation prevention with indicator
- Maximal coverage for CE approved repeater
- Sustaining BeiDou/Galileo/Glonass/GPS fix when moving from indoors to outdoors
- Full product family with repeaters, amplifiers, and splitters

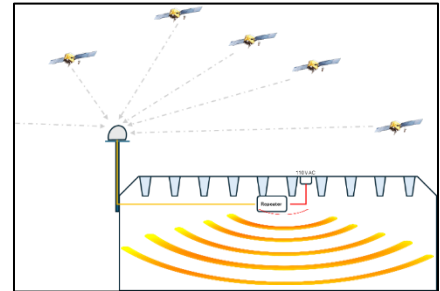


Application examples:

- GPS's L5 signal with its higher power and lower frequency is the most advanced civilian signal available from GPS and the US DoD developed it for increased aviation security. GNSS-L-BAND-12 is great for use in aircraft hangars for testing of avionics and positioning equipment on the aircraft.
- Galileo E5 – split into E5a and E5b, used independently or together for indoor testing of equipment using E5 signals.
- The Galileo Public Regulated Service (PRS) is a service exclusively for authorized users on E1 and E6 frequencies. The E6 provides correction data for high-accuracy services, delivering precise point positioning (PPP) and a higher data rate, ideal for global, high-accuracy positioning applications. The PRS service includes protection against interference, jamming, and spoofing, ensuring secure and reliable position and timing information for public authorities and critical systems operators. Use GNSS-L-BAND-12 indoors to provide signals for both E1 and E6 frequencies. These systems are particularly useful for critical applications like public safety, military operations, and infrastructure management, where secure and tamper-proof navigation is essential.

How does the ROGER™ GNSS Repeater work?

The ROGER™-GPS repeater works by receiving satellite signals (BeiDou/Galileo/Glonass/GPS) with an outside antenna that has a free and unobstructed view of the sky and the satellites. The active antenna distributes the signals via a coaxial cable to the repeater which then re-radiates the signals indoors or underground.

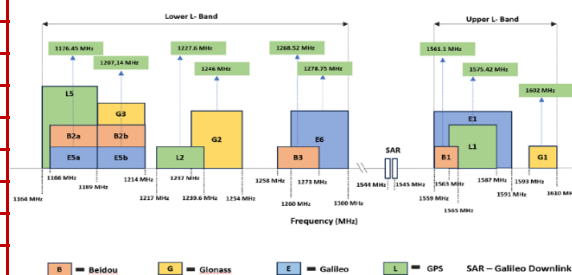


The GNSS-L-BAND-12 is available as part of a GNSS repeater kit that includes all the parts needed for installation:

- GNSS-L-BAND-12-BP-US (Complete kit including 20 m (~65' coaxial cable assembly))
- GNSS-L-BAND-12-BP40-US (Complete kit including 40 m (~131' coaxial cable assembly))

Technical Specifications	
Frequency:	BeiDou B1 (1.5611 GHz), B2 (1.1890GHz), B3 (1.26852 GHz) / Galileo E1 (1.57542 GHz), E5a (1.17645 GHz), E5b (1.207140 GHz), E6 (1.27875 GHz) / Glonass G1 (1.600995 GHz), G2 (1.24806 GHz), G3 (1.20714 GHz) / GPS L1 (1.57542 GHz), L2 (1.2276 GHz), L5 (1.17645 GHz)
Size:	8.66 x 4.76 x 2.48" (220 x 121 x 63 mm)
Enclosure rating:	IP67
Weight:	19.85 oz (563 g)
Overall gain:	>40 dB
Adjustable Gain:	0 – 40 dB
Impedance:	50 Ω
Input connector:	TNC Female
Operating Temperature:	-13 - +131° F (-25 - + 55° C)
Current consumption:	Max. 300 mA
DC Input:	12 VDC
Indoor Coverage:	Up to 164 ft. (50 m)
Antenna power output::	+ 5 VDC, 100 mA
TX Antenna Gain:	Max.+4dBd, RHCP polarized

GNSS Frequencies in L Band



Right-Hand Circular Polarization reduces interference



High Tech Products – Outstanding Service

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