As with any electromagnetic radio wave, GNSS signals become attenuated as they are passed through electrical cable. The amount of signal loss depends on the type and length of the cable used. Typically, when antenna cable runs exceed 50 feet, signal loss can become excessive. The inline amplifiers eliminate this problem by amplifying the GNSS signal. This includes GPS, GLONASS, GALILEO, BEIDOU, SBAS and L-BAND. With the proper amplifier, you can extend your antenna cable runs to hundreds of feet.

GNSS receivers also suffer from the effects of EMI. Electromagnetic interference can originate from an external source or even from within the receiver itself. Our inline amplifiers filter and reject unwanted interference and pass GNSS signals through. By amplifying and filtering the GNSS signal before it gets to the receiver, the effect of internally generated electrical noise is reduced.

The inline amplifiers are capable of amplifying all GNSS frequencies and will improve performance on receivers with cable lengths of over 50 ft. They’re available with SMA, TNC, BNC, or N connectors and no special wiring is required, making installation a breeze.

The amplifiers are made with gold plated brass with rugged and watertight packaging. Just plug the amplifier directly in line with your antenna cable. Power to the inline amplifier is already available from your GPS receiver, the inline amplifier uses the same power as the antenna so no extra wiring is required. As with all our products, our inline amplifiers come with a full one year parts and labour warranty.
Inline Amplifiers
LA series of Inline Amplifiers

GENERAL INFORMATION

Inline Amplifiers with TNC connectors are 3.770” in length. Length will vary slightly with “N” and “SMA” connectors installed. Power consumption 8mA.

- Typical Noise figure for L1 Inline Amplifiers is < 3 dB.
- Typical Noise figure for L1L2 Inline Amplifiers is < 4 dB.
- Input voltage for all models is from 3 to 28 VDC. Current draw is < 10 ma.
- Operating temperature is -55°C (-67°F) to +70°C (158°F)
- Storage temperature is -55°C (-67°F) to +85°C (185°F)
- Relative humidity 0 - 100% condensing

**MODEL (L1 FREQ.) CONNECTORS**

**MODEL** | **CONNECTORS**
---|---
GPS L1/L2, GLONASS, GALILEO, BEIDOU, SBAS, L-BAND 12db Gain | LA-12-1575-100N N type, female
LA-12-1575-100S SMA type, female
LA-12-1575-100T TNC type, female
LA-12-1575-100NS N one side, SMA the other
LA-12-1575-100NT N one side, TNC the other
LA-12-1575-100ST SMA one side, TNC the other

**MODEL** | **CONNECTORS**
---|---
LA-12-21db 1575Mhz 21db Gain | LA-12-21-1575-100N N type, female
LA-12-21-1575-100S SMA type, female
LA-12-21-1575-100T TNC type, female
LA-12-21-1575-100NS N one side, SMA the other
LA-12-21-1575-100NT N one side, TNC the other
LA-12-21-1575-100ST SMA one side, TNC the other

**MODEL (L1 FREQUENCY) CONNECTORS**

**MODEL** | **CONNECTORS**
---|---
LA-21-1575-100N N type, female
LA-21-1575-100S SMA type, female
LA-21-1575-100T TNC type, female
LA-21-1575-100NS N one side, SMA the other
LA-21-1575-100NT N one side, TNC the other
LA-21-1575-100ST SMA one side, TNC the other

**MODEL (L2 FREQUENCY) CONNECTORS**

**MODEL** | **CONNECTORS**
---|---
LA-21-1575-100N N type, female
LA-21-1575-100S SMA type, female
LA-21-1575-100T TNC type, female
LA-21-1575-100NS N one side, SMA the other
LA-21-1575-100NT N one side, TNC the other
LA-21-1575-100ST SMA one side, TNC the other

Note: LA-12-L1/L2 12db shown. LA-21-L1/L2 is the same except for gain.