

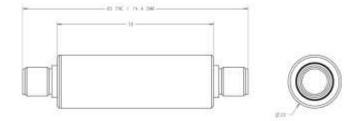
# TW127 1559 MHz to 1610 MHz 25 dB gain In-line Amplifier

The TW127 is a low cost, rugged, waterproof, low noise, 1559 MHz to 1610 MHz band, 25dB gain in-line amplifier, specially designed to amplify all GNSS L1 frequencies. The TW127 features a two stage LNA with a mid-section SAW filter. It allows longer cable runs for applications such as mast-mount, large vehicle and timing systems, without degradation of system sensitivity.

The standard model offers low current consumption and DC pass through which allows both the antenna and the TW127 inline amplifier to be powered by the GNSS receiver without additional hardware such as bias-T, power cable and power supply. The TW127 is optionally available without DC Pass-through. A High Current version is also available.

IMPORTANT: Amplifiers are directional and must be installed in the orientation indicated on the product label





# **Applications**

- All L1 GNSS Signals
- Commercial, Industrial and Military Telematics Systems
- Wireless and Telecom Timing and Synchronization Applications

### **Features**

- Very low noise
- High-Rejection Mid-Section SAW filter
- Wide input voltage 3 to 10 Volts
- Nickel-plated brass, IP67 compliant housing
- Powered via antenna coax from receiver
- 50 Ohm port impedance
- Available SMA, TNC or N-type jack connectors
- RoHS and REACH compliant

### **Benefits**

- Improves signal reception
- Enables extended cable runs
- Avoid installation of costly low-loss cable
- Fits in line with antenna cable
- No external DC power supply required
- Easy to install mounting clamp included



# TW127 1559 MHz to 1610 MHz 25 dB gain In-line Amplifier **Specifications**

Vcc =3.3V, over full bandwidth, T=25 °C

#### **Electrical**

Nominal Gain 25 dB +4/-0 dB typ.

Pass Band Ripple +/-2 dB
Impedance 50 Ohms

Noise Figure 2 dB typ.
Bandwidth 1559 – 1610 MHz

Input VSWR 1.5 typ. / 2 max.
Output VSWR 1.5 typ. / 2 max.

Reverse Isolation >35 dB
Output 1dB -10 dB
Output IP3 +5 dBm

Supply Range voltage 3 to 10 VDC Nominal

Supply Current 10 mA typ, 15 mA max. (HC model 25 mA typical)

## **Mechanicals & Environmental**

Mechanical Size (body dimensions only) 2.32" L x 0.787" Dia. (59 mm L x 20 mm dia.)

Weight <85g Connectors SMA

Connectors SMA Jack or TNC Jack **Torque Limitations (lbs)** N-type TNC SMA

Enclosure

Environmental

Warranty

Nickel-plated brass
RoHS and IP67 compliant
One year – parts and labour

## **Ordering Information**

TW127 - 25dB gain In-Line Amp with SMA Jack
 TW127 - 25dB gain In-Line Amp with TNC Jack
 33-0127-00
 33-0127-01

• TW127 - 25dB gain In-Line Amp with N-type 33-0127-14 (premium applies)

TW127 -25dB gain In-Line Amp, with DC pass-through block
 TW127 - 25dB gain In-Line Amp with high current (25mA typ.)
 33-127-X-DCB
 33-127-X-HC

Please contact Tallysman Wireless for additional information

### **Tallysman Wireless Inc**

36 Steacie Drive Ottawa ON K2K 2A9 Canada

Tel 613 591 3131 Fax 613 591 3121

sales@tallysman.com

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