



A Tallysman Accutenna®

TW3870 / TW3872 GPS L1/L2 + GLONASS G1/G2 + BeiDou B1 + Galileo E1

The TW3870/ TW3872 employ Tallysman's unique *Accutenna* technology providing dual band GPS L1/L2, GLONASS G1/G2 + BeiDou B1 + Galileo E1 coverage and is especially designed for precision dual frequency positioning.

The TW3870/TW3872 features a precision tuned, circular dual feed, stacked patch element. The signals from the two orthogonal feeds are combined in a hybrid combiner, amplified in a wide-band LNA, then band-split for narrow filtering in each band and further amplified prior to recombination at the output.

The TW3870/TW3872 offers excellent axial ratio and a tightly grouped phase center variation.

The TW3870/TW3872 covers GPS L2 (1227.6MHz), GLONASS G2 (1248MHz centre), GPS L1/WAAS/EGNOS/MSAS (1575.42MHz), GLONASS G1 (1602MHz, centre), BeiDou B1 and Galileo E1. (1561 and 1589 MHz).

The TW3872 has a pre-filter which increases the antenna's immunity to high amplitude interfering signals, such as LTE and other cellular signals.

The TW3870/TW3872 is housed in a through-hole mount, weather-proof enclosure for permanent installations. L Bracket or Pipe Mount (part numbers 23-0040-0, 23-0065-0 respectively) are available for non-rooftop installation. A 100mm ground plane is recommended for non-roof-top installations.

This product is also available in an OEM formats (TW3865, TW3870E, TW3872E, and TW3868)

Applications

- Precision GPS position
- Dual Frequency RTK receivers
- Mission Critical GPS Timing
- Military & Security
- Network Timing and Synchronization

Features

- Very low Noise Preamp, < 2dB
- Axial ratio L1: ≤1 dB typ. 1.5 dB max.
- Tight Phase Center Variation
- LNA Gain 35 dB typ.
- Low current: 24 mA typ.
- ESD circuit protection: 15 KV
- Invariant performance from: +2.5 to 16VDC

Benefits

- Ideal for L1/L2 RTK surveying systems
- Great multipath rejection
- Increased system accuracy
- Great signal to noise ratio
- IP67, REACH, and RoHS compliant



TW3870 Dimensions (mm)

