A Tallysman Accutenna®
TW3865 / TW3867 GPS L1/L2 + GLONASS G1/G2 + BeiDou B1 + Galileo E1

The TW3865 and TW3867 employ Tallysman’s unique Accutenna technology providing dual band GPS L1 & L2, GLONASS G1 & G2, BeiDou B1, and Galileo E1 coverage and is especially designed for precision dual frequency positioning.

The antennas feature 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 wideband LNA, then band-split for narrow filtering in each band and further amplified prior to recombination at the output.

The TW3867 has a strong pre-filter to mitigate intermodulated signal interference from LTE and other cellular bands.

Both antennas offer excellent axial ratio and a tightly grouped phase center.

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

The OEM antennas are supplied with a standard 60mm diameter circular ground plane, with a coaxial cable terminated with your choice of connector (right angle MCX is shown in the drawing). Mounting holes are provided for attachment to larger ground planes. Custom tuning and ground plane options may be available, depending on purchase level commitment.

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

Features
- Very low Noise Preamp,
- Axial ratio L1: ≤1.0 dB typ. 1.5 dB max.
- Tight Phase Center Variation
- LNA Gain 28 dB typ.
- Low current: 24 mA typ.
- ESD circuit protection: 15 KV
- Invariant performance from: +2.5 to 12VDC

Benefits
- Ideal for dual frequency RTK and PPP surveying systems
- Great multipath rejection
- Increased system accuracy
- Great signal to noise ratio
- RoHS and REACH compliant

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Specifications (Measured a Vcc = 3V, and Temperature=25°C)

**Antenna**
- **Patch Architecture**: Circular, Dual Feed, Dual Stacked Patch
- **L2 Gain (100mm ground plane)**: 1227.6-1246MHz
- **L1 Gain (100mm ground plane)**: 1557MHz-1606MHz
- **Axial Ratio, L1/G1, L2/G2**:
- **1dB Bandwidth, Polarization**:

**Electrical**
- **Bandwidth**
- **Overall LNA Gain**
- **Gain Variation with Temperature**
- **LNA Noise Figure**
- **VSWR (at LNA output)**
- **Supply Voltage Range**
- **EMI Immunity**
- **Supply Current**
- **ESD Circuit protection**
- **Out-of-Band Rejection**

**Mechanicals & Environmental**
- **Mechanical Size, Ground Plane**
- **Operating Temperature Range**
- **Weight**
- **Attachment Method**
- **Environmental**
- **Shock**
- **Vibration**
- **Warranty**

### Ordering Information

- **TW3865 – GPS L1/L2 + GLONASS G1/G2 + BeiDou B1 + Galileo E1 antenna**
- **TW3867 – GPS L1/L2 + GLONASS G1/G2 + BeiDou B1 + Galileo E1 antenna**

Where xx = connector type, yyyy = cable length in mm and zz = assigned by Tallysman for custom tuning

Please refer to the Ordering Guide [here](http://www.tallysman.com/orderingguide.php) for the current and complete list of available connectors.

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