When precision matters.

A Tallysman *Accutenna*® TW2410/TW2412 Magnetic Mount GPS/GLONASS Antenna

The TW2410/TW2412 employs Tallysman's unique *Accutenna*® technology covering the GPS L1, GLONASS L1 and SBAS (WAAS, EGNOS & MSAS) frequency bands (1574 to 1606 MHz). It is especially designed for precision industrial, agricultural and military OEM applications. It provides truly circular response over its entire bandwidth thereby producing superior multipath signal rejection.

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GNSS

The TW2410/TW2412 features a dual-feed wideband patch element, with a two stage Low Noise Amplifier, comprised of one input LNA per feed, a mid section SAW to filter the combined output, and a final output gain stage. This configuration provides excellent axial ratio that is constant across the full frequency band. An optional tight pre-filter is available with part number TW2412 to protect against saturation by high level sub-harmonics and L-Band signals.

The TW2410/ TW2412 is housed in a compact, industrial-grade weather-proof, magnet mount enclosure, and is available with a variety of connectors and cable lengths.

The antenna can be ordered without the magnet. In such cases, the magnet is replaced with a plastic plug to provide a smooth under surface

Applications

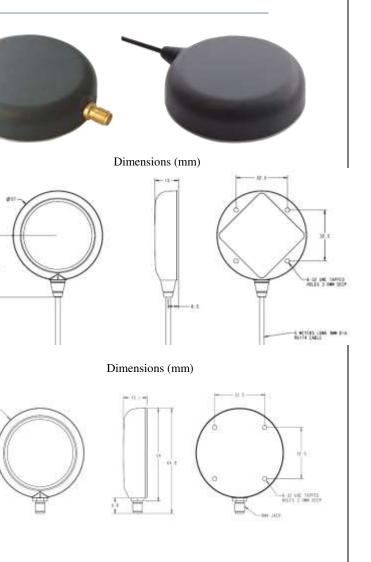
- High Accuracy & Mission Critical GNSS
- Precision Agriculture, Mining & Construction
- Military & Security
- Avionics
- Law Enforcement & Public Safety
- Fleet Management & Asset Tracking

Features

- Great axial ratio: <1 dB at zenith
- Low noise LNA: 1.5dB typ.
- High rejection SAW filter
- LNA gain: 28 dB typ.
- Low current: 15 mA typ.
- Wide voltage input range: 2.5 to 16 VDC
- IP67 weather proof housing

Benefits

- Excellent multipath rejection
- Increased system accuracy
- Excellent signal to noise ratio
- Great out of band signal rejection
- Ideal for harsh environments
- RoHS compliant





TW2410/TW2412 Magnet Mount GPS/GLONASS Antenna

Specifications Vcc = 3V, over full bandwidth, T=25°C

Antenna

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Architecture 1 dB Bandwidth Antenna Gain (with 100mm ground plane) Axial Ratio (for both L1 and G1) @zenith

Electrical

Architecture Filtered LNA Frequency Bandwidth Polarization LNA Gain Gain flatness Out-of-Band Rejection <1500 MHz <1550 MHz >1640 MHz

VSWR (at LNA output) Noise Figure Supply Voltage Range (over coaxial cable) Supply Current ESD Circuit Protection

Mechanicals & Environmental

Mechanical Size Cable Operating Temp. Range Enclosure Weight Attachment Method Environmental Shock Vibration Dual, Quadrature Feeds 32 MHz 4.25 dBic <1 dB

One LNA per feed line, mid section SAW filter 1574 to 1606 MHz RHCP 28 dB min., 1575.42 to 1606 MHz +/- 2 dB, 1575 to 1605 MHz >32 dB (TW2410) >50dB (TW2412) >25 dB (TW2410) >50 dB (TW2412) >35 dB (TW2410) >70 dB (TW2412) <1.5:1 typ 1.8:1 max 1.5dB typ. (TW2410) 3.5dBtyp. (TW2412) +2.5 to 16 VDC nominal (12VDC recommended maximum) 15 mA typ, 25mA Q max (85°C). 15 KV air discharge

57 mm dia. x 15 mm H RG174 / 5 metres, other lengths optional -40 to +85 °C Radome: EXL9330, Base: Zamak white metal 110 g Magnet or permanent (pre-tapped 4 x 6-32 UNC) IP67 and RoHS compliant Vertical axis: 50 G, other axes: 30 G 3 axis, sweep = 15 min, 10 to 200 Hz sweep: 3 G

Ordering Information

TW2410: 33-2410-xx-yyyy TW2412: 33-2412-xx-yyyy Where xx = connector type and yyyy = cable length in mm

Please refer to the Ordering Guide <u>(http://www.tallysman.com/wp-content/uploads/Current-Ordering-Guide.pdf)</u> for the current and complete list of available connectors.



Contact NavtechGPS for product details. www.NavtechGPS.com +1-703-256-8900 • 800-628-0885 • info@navtechgps.com

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