





When precision matters...

## TW2410/TW2412 Magnet Mount GPS/GLONASS Antenna Specifications

Vcc = 3V, over full bandwidth, T=25°C

### Antenna

|  |                        |
|--|------------------------|
| Architecture                             | Dual, Quadrature Feeds |
| 1 dB Bandwidth                           | 32 MHz                 |
| Antenna Gain (with 100mm ground plane)   | 4.25 dBic              |
| Axial Ratio (for both L1 and G1) @zenith | <1 dB                  |

### Electrical

|   |  |
|---|--|
| Architecture                              | One LNA per feed line, mid section SAW filter      |
| Filtered LNA Frequency Bandwidth          | 1574 to 1606 MHz                                   |
| Polarization                              | RHCP   |
| LNA Gain                                  | 28 dB min., 1575.42 to 1606 MHz                    |
| Gain flatness                             | +/- 2 dB, 1575 to 1605 MHz                         |
| Out-of-Band Rejection                     | <1500 MHz >32 dB (TW2410) >50dB (TW2412)           |
|   | <1550 MHz >25 dB (TW2410) >50 dB (TW2412)          |
|   | >1640 MHz >35 dB (TW2410) >70 dB (TW2412)          |
| VSWR (at LNA output)                      | <1.5:1 typ 1.8:1 max                               |
| Noise Figure                              | 1.5dB typ. (TW2410) 3.5dBtyp. (TW2412)             |
| Supply Voltage Range (over coaxial cable) | +2.5 to 16 VDC nominal (12VDC recommended maximum) |
| Supply Current                            | 15 mA typ, 25mA Q max (85°C).                      |
| ESD Circuit Protection                    | 15 KV air discharge                                |

### Mechanicals & Environmental

|                       |   |
|-----------------------|---|
| Mechanical Size       | 57 mm dia. x 15 mm H                            |
| Cable                 | RG174 / 5 metres, other lengths optional        |
| Operating Temp. Range | -40 to +85 °C                                   |
| Enclosure             | Radome: EXL9330, Base: Zamak white metal        |
| Weight                | 110 g   |
| Attachment Method     | Magnet or permanent (pre-tapped 4 x 6-32 UNC)   |
| Environmental         | IP67 and RoHS compliant                         |
| Shock                 | Vertical axis: 50 G, other axes: 30 G           |
| Vibration             | 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 (<http://www.tallysman.com/wp-content/uploads/Current-Ordering-Guide.pdf>) for the current and complete list of available connectors.



Contact NavtechGPS for product details. [www.NavtechGPS.com](http://www.NavtechGPS.com)  
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