

# TW2500 Magnet Mount Globalstar<sup>TM</sup> Certified STU Antenna

The TW2500 by Tallysman Wireless is a professional grade, magnet mount, passive left hand circularly polarised antenna for the 1610 to 1620 MHz frequency band, certified and specifically designed to maximise performance of the Globalstar™ STU (Simplex Transmit Unit) Modem.

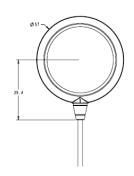
The TW2500 features a high performance dualfeed patch element that provides great axial ratio (3 dB max) over the entire Globalstar™ frequency band, thus signals at the band edges remain truly circular, unlike the response of single feed antennas.

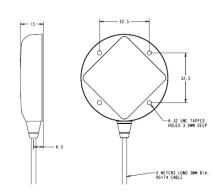
The TW2500 is housed in a compact, industrialgrade weather-proof, magnet mount enclosure, with threaded base holes for screw down attach. It is available with a 50 cm cable. allowing for the STU modem to be mounted out of the elements and reach, and still providing excellent Globalstar™ signal coverage.



- Simplex Transmit Unit (STU) Applications
- Sea & Land Container Tracking
- Military & Security
- Fleet Management & Asset Tracking
- Marine & Avionics Systems
- Law Enforcement & Public Safety







### **Features**

- Custom high gain 4.25 dBic dual-feed patch
- Great axial ratio, 3 dB over full bandwidth
- ESD 15 KV circuit protection
- Weather proof, IP67 housing
- Robust Industrial grade enclosure
- Magnet or screw mount
- Wide range of connector options

### **Benefits**

- Excellent circular polarized signal transmission
- Industrial temperature range
- Rugged Design
- Ideal for harsh environments
- RoHS compliant
- Remote STU antenna



# TW2500 Magnet Mount Globalstar<sup>TM</sup> Certified STU Antenna **Specifications** Over full bandwidth, T=25°C

### Antenna

Architecture Dual, quadrature feeds

Antenna Gain (100mm ground plane) 4.25 dBic Axial Ratio (over full bandwidth)  $\leq$ 3 dB

0.5dB Bandwidth 1600MHz to 1630MHz

**Electrical** 

Architecture Hybrid 90° phase splitter

Frequency Bandwidth 1615 MHz ±10 MHz

Polarization LHCP

Gain flatness ≤1 dB, from 1610 to 1620 MHz

VSWR (at antenna) <1.5:1
Return Loss (10 dB bandwidth) <-20MHz

ESD Circuit protection 15 KV air discharge

### **Mechanicals & Environmental**

Mechanical Size 57 mm dia. x 15 mm H

Connectors SMA, TNC, MCX Male (Plug). Other connectors optional

Cable RG174 / 50 cm, custom lengths optional

Operating Temp. Range -40 to +85 °C

Enclosure Radome: ASA Plastic, Base: Zamak White Metal

Weight 15

Attachment Method Magnet or permanent (pre-tapped 4 x 6-32UNC)

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

Warranty One year – parts and labour

# **Ordering Information**

**Legacy Part Numbers:** 

TW2500 – Globalstar<sup>™</sup> STU antenna, 50 cm cable, SMA Male 32-2500-0 TW2500 – Globalstar<sup>™</sup> STU antenna, 50 cm cable, TNC Male 32-2500-1 TW2500 – Globalstar<sup>™</sup> STU antenna, 50 cm cable, MCX Male 32-2500-2

TW2500 – Globalstar<sup>™</sup> STU antenna, 33-2500-xx-yyyy Where xx = connector type and yyyy = cable length in mm

Please refer to the Ordering Guide (<a href="http://www.tallysman.com/orderingguide.php">http://www.tallysman.com/orderingguide.php</a>) for the current and complete list of available connectors.

# **Tallysman Wireless Inc**

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<sup>\*</sup> As a result of a growing product portfolio, Tallysman has rationalized its part number system. No changes have been made to the mechanical or electrical properties of these products. Where administratively possible, please use the following Part Numbers.