

# TW3500 Permanent Mount Globalstar<sup>TM</sup> STU Antenna

The TW3500 by Tallysman Wireless is a professional grade, permanent mount, passive left hand circularly polarised antenna for the 1610 to 1620 MHz frequency band, specifically designed to maximise the performance of the Globalstar™ STU (Simplex Transmit Unit) Modem.

The TW3500 features a high performance dual-feed 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 TW3500 is housed in a permanent mount industrial-grade weather-proof enclosure and comes with a TNC Jack (female) connector, allowing for the Globalstar™ modem to be mounted out of the elements and reach, and still providing excellent Globalstar™ signal coverage.

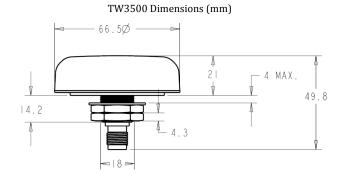
# **Applications**

- 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
- 15 KV ESD circuit protection
- IP67 weather proof housing
- Robust Industrial grade enclosure
- Surface, bracket or mast mount





## **Benefits**

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



# TW3500 Permanent Mount Globalstar<sup>TM</sup> STU Antenna **Specifications**

Vcc = 3V, over full bandwidth, T=25°C

#### Antenna

Architecture Dual, quadrature feeds

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

## **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 66.5 mm dia. x 21 mm H

Connectors TNC Jack (female)

Cable (Option) Custom cable assembly available.

Operating Temp. Range -40 to +85 °C

Enclosure Radome: ASA Plastic, Base: Zamak White Metal

Weight 150

Attachment Method Permanent ¾" (19mm) through hole mount

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**

TW3500 – Globalstar<sup>™</sup> antenna, TNC Female 32-3500-0

Please contact Tallysman Wireless for additional information

## **Tallysman Wireless Inc**

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