



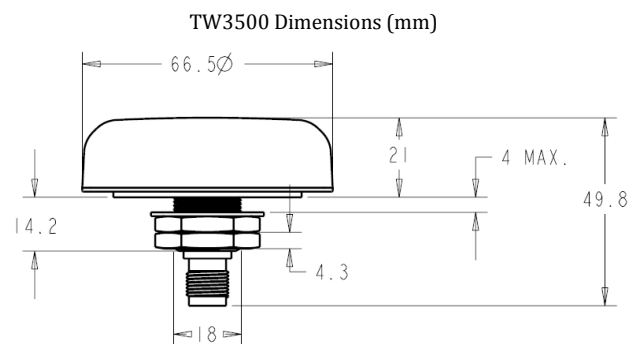
When precision matters...™

TW3500 Permanent Mount Globalstar™ 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



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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 g
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

Legacy Part Number:

TW3500 – Globalstar™ antenna, TNC Female 32-3500-0

* 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.

TW3500 – Globalstar™ antenna 33-3500-xx-yy-zzzz

Where xx = connector type, yy = shape and colour of radome and zzzz = cable length in mm (where applicable)

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

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