

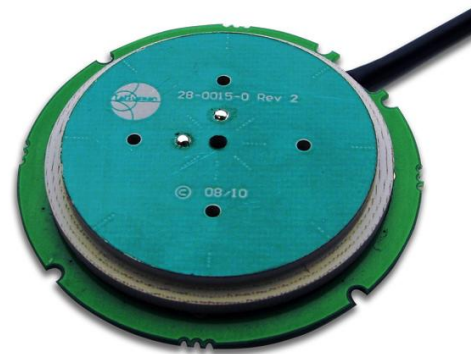


TW2505 Embedded Globalstar™ Certified STU Antenna

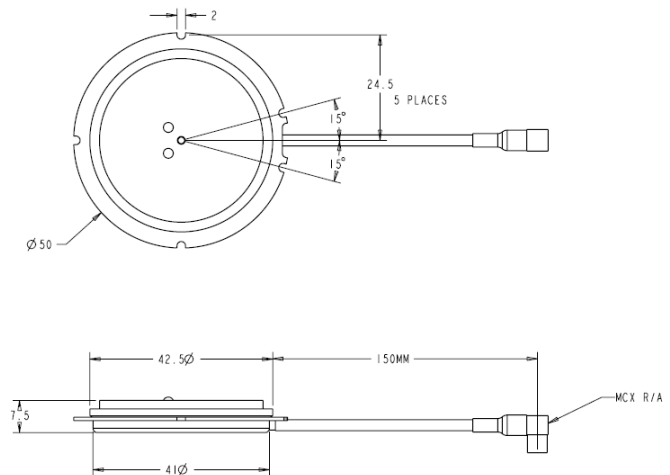
The TW2505 by Tallysman Wireless is a professional grade, embedded, passive left hand circularly polarized antenna for the 1610 to 1620 MHz frequency band, certified and specifically designed to maximise the performance of the Globalstar™ STU (Simplex Transmit Unit) Modem.

The TW2505 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 TW2505 provides excellent Globalstar™ signal coverage, and comes in a compact circular form factor with a built-in 50 mm diameter ground plane and with a 15 cm RG174 cable.



TW2505 Dimensions (mm)



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
- Robust design
- Small form factor

Benefits

- Excellent circular polarized signal transmission
- Industrial temperature range
- Rugged Design
- RoHS compliant



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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 signal 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 (over 10 dB bandwidth)	<-20dB
ESD Circuit protection	15 KV air discharge

Mechanicals & Environmental

Mechanical Size	50 mm dia. x 7.8 mm H
Connectors	Male, SMA straight, MCX right angle or MMCX right angle, other connectors optional
Cable	RG174 / 15 cm, custom lengths optional
Operating Temp. Range	-40 to +85 °C
Weight	100 g
Attachment Method	Adhesive or screw mount
Environmental	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

TW2505 – Globalstar™ STU antenna, 15cm cable, SMA Male	32-2505-0
TW2505 – Globalstar™ STU antenna, 15cm cable, MCX R/A	32-2505-5
TW2505 – Globalstar™ STU antenna, 15cm cable, MMCX R/A	32-2505-6

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