TW4600 Wideband Dual Feed Iridium™ Antenna

The TW4600 by Tallysman Wireless is a low cost dual feed, magnetic mount, passive Right Hand Circularly Polarised (RHCP) antenna for the 1616MHz to 1626MHz frequency band, specifically designed to maximise the performance of Iridium™ Satellite communication modems.

The wideband dual feed patch element in the TW4600 has an excellent axial ratio across the entire Iridium™ bandwidth. Unlike single feed antennas, the TW4600 provides excellent multipath rejection and a truly circular transmission response across the Iridium™ band.

The TW4600 is the smallest dual feed, high performance Iridium™ antenna available. It is housed in a compact IP67 magnetic mount enclosure. It available with a 50cm coaxial cable that allows for an Iridium™ modem to be mounted away from the weather, yet still provide excellent communications coverage.

Applications
- Iridium™ Satellite Communications Applications
- Sea & Land Container Tracking
- Military & Security
- Fleet Management & Asset Tracking
- Marine & Avionics Systems
- Law Enforcement & Public Safety

Features
- Novel 25mm wide-band dual feed patch
- 4.25 dBi Gain on 100mm Ground plane.
- Great axial ratio, <3 dB over full bandwidth
- Weather proof, low cost IP67 housing
- Magnetic mount
- Wide range of connector options

Benefits
- Truly circular polarized signal transmission
- Industrial temperature range
- Rugged Design
- No-compromise performance for cost sensitive applications
- RoHS compliant
- Remote Iridium™ modem antenna

www.tallysman.com
TW4600 Wideband Dual Feed Iridium™ Antenna

Specifications Over full bandwidth, T=25°C

**Antenna**
- Architecture: Dual, quadrature feeds
- Antenna Gain (100mm ground plane): 4.25dBiC
- Axial Ratio (over full bandwidth): ≤3dB
- 1.0 dB Bandwidth: 1605MHz to 1635MHz

**Electrical**
- Architecture: Dual Feed Patch -> Hybrid 90° Combiner
- Polarization: RHCP
- Gain flatness: ≤1dB, from 1611MHz to 1631MHz
- VSWR (at antenna): <1.5:1
- Return Loss (-10 dB bandwidth): <-20MHz
- ESD Circuit protection: 15KV air discharge

**Mechanicals & Environmental**
- Mechanical Size: 38mm x 38mm dia. x 14.3mm High
- Connectors: SMA male standard, others available
- Cable: RG174 / 3metres, other lengths optional
- Operating Temp. Range: -40°C to +85°C
- Enclosure: Radome and base: ASA plastic
- Weight: Enclosure + SMA connector 34gm, cable 0.31gm/cm
- Attachment Method: Magnetic
- Environmental: IP67 and RoHS compliant
- Shock: Vertical axis: 50G, other axes: 30G
- Vibration: 3 axis, sweep = 15 min, 10 to 200Hz sweep: 3G
- Warranty: One year, parts and labour

**Ordering Information**
- TW4600 – Iridium™ Antenna, 50cm cable, SMA Male
- xx = Connector type, (SMA male standard), yyyy= Coaxial cable length (50cm standard)

**Tallysman Wireless Inc**
106 Schneider Road, Unit 3
Ottawa ON K2K 1Y2 Canada
Tel 613 591 3131
Fax 613 591 3121
sales@tallysman.com

© 2012 Tallysman Wireless Inc. All rights reserved.