

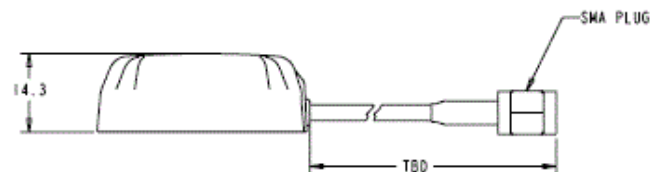
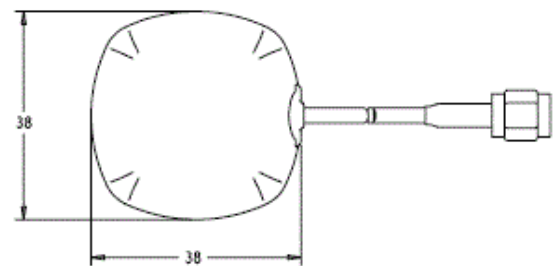


A Tallysman Accutenna™ TW4600 Wideband Dual Feed Iridium™ Antenna

The TW4600 employs Tallysman's unique Accutenna™ technology in a compact 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.



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



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
Radiated sign Bandwidth (-1dB)	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 Bandwidth (-10 dB)	>20MHz

Mechanicals & Environmental

Mechanical Size	38mm x 38mm dia. x 14.3mm High
Cable	RG174
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

Legacy Part Number:

TW4600 – Iridium™ Antenna 32-4600-xx-yyyy
Connector: xx = 00 SMA male , 01 = TNC male 02 = MCX male 03 = MMCX male 04 = SMB male
05 = MCX right angle male 06 = MMCX right angle male 10 = SMA R/A** 11 = Reverse polarity SMA**

** Premiums apply. Please contact your Distributor

Cable length: yyyy = cable length in mm

* 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.

TW4600 – Iridium™ Antenna 33-4600-xx-yyyy

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

Tallysman Wireless Inc

106 Schneider Road, Unit 3

Ottawa ON K2K 1Y2 Canada

Tel 613 591 3131

Fax 613 591 3121

sales@tallysman.com

The information provided herein is intended as a guide only and is subject to change without notice. This document is not to be regarded as a guarantee of performance. Tallysman Wireless Inc. hereby disclaims any or all warranties and liabilities of any kind. © 2010 Tallysman Wireless Inc. All rights reserved.

Rev 3