

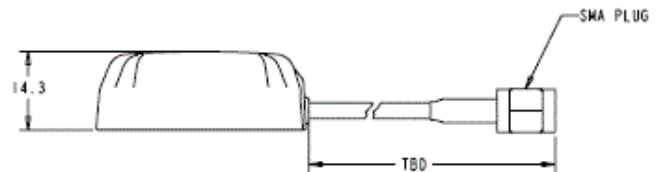
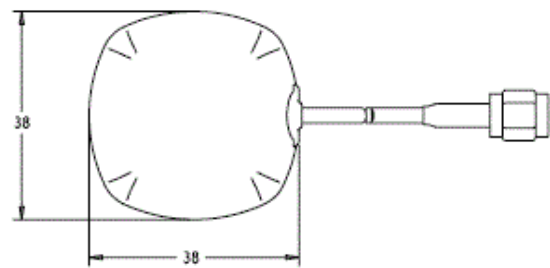


A Tallysman *Accutenna*® TW4600 Wideband Dual Feed Iridium® Antenna

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 dBic 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 typ. 1.8:1 max.
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: EXL9330
Weight	Enclosure + SMA connector 34gm, cable 0.31gm/cm)
Attachment Method	Magnetic and/or adhesive tape
Environmental	IP67, REACH, 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 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.

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