



A Tallysman *Accutenna*® TW2643P Magnet Mount Passive Iridium® / GNSS Antenna

The TW2643P employs Tallysman's unique *Accutenna* technology in a magnet mount, passive right hand circularly polarised antenna for the reception of all of the GNSS constellations (GPS L1/GLONASS G1/ Galileo E1/ BeiDou B1) plus Iridium: 1559 to 1626.5 MHz frequency band. It is certified and specially designed to maximize the performance of Iridium™ Voice and Data Modems plus the upper GNSS band (1559 - 1606MHz)

The TW2643P features a high performance dual-feed patch element that provides great axial ratio (4.5dB max, <1.5dB @ zenith) over the entire Iridium™ + upper GNSS frequency band, thus signals at the band edges remain truly circular, unlike the response of single feed antennas.

The TW2643P is housed in a compact, industrial-grade weather-proof, magnet mount enclosure, with threaded base holes for screw down attachment.

Applications

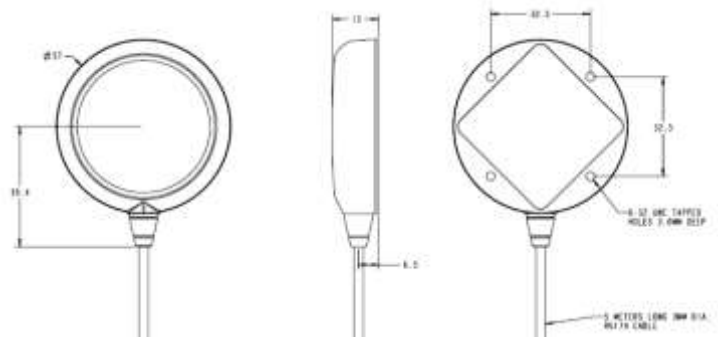
- Iridium™ Voice and Data Applications+ GNSS
- Sea & Land Container Tracking
- Military & Security
- Fleet Management & Asset Tracking
- Marine & Avionics Systems
- Law Enforcement & Public Safety

Features

- Custom high gain, 5dBic dual-feed patch
- Great axial ratio, <1.5dB over full bandwidth
- 15 KV ESD circuit protection
- IP67 weather proof housing
- Robust Industrial grade enclosure
- Magnet or screw mount



TW2643P Dimensions (mm)



Benefits

- Excellent circular polarized signal transmission
- Industrial temperature range
- Rugged Design
- Ideal for harsh environments
- RoHS compliant
- Remote SBD antenna



TW2643P Magnet Mount Passive Iridium® / GNSS Antenna

Specifications Vcc = 3V, over full bandwidth, T=25°C

Antenna

Architecture	Dual, quadrature feeds			
Antenna Gain (dBic, 100mm ground plane)	B1/E1	L1	G1	Iridium
	>3.5	>4.5	>5	>4.5
Axial Ratio (over full bandwidth)	≤1.5 dB			

Electrical

Frequency Bandwidth	1559 to 1626.5 MHz
Polarization	RHCP
Cross Polarization Rejection	typically 20dB
VSWR (at antenna)	<1.5:1 typ 1.8:1 max.
ESD Circuit protection	15 KV air discharge

Mechanicals & Environmental

Mechanical Size	57 mm dia. x 15 mm H
Cable	RG174 / 50 cm, custom lengths optional
Operating Temp. Range	-40 to +85 °C
Enclosure	Radome: ASA plastic, Base: Zamak white metal
Weight	160 g
Attachment Method	Magnet or permanent (pre-tapped 4 x 6-32UNC)
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

Ordering Information

TW2643P – Passive Iridium™ + GNSS antenna, 33-2643P-xx-yyyy
Where xx = connector type and yyyy = cable length in mm

Please refer to the Ordering Guide (<http://www.tallysman.com/wp-content/uploads/Current-Ordering-Guide.pdf>) for the current and complete list of available connectors.

Tallysman Wireless Inc

36 Steacie Drive
Ottawa ON K2K 2A9 Canada
Tel +1 613 591 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. © 2011 Tallysman Wireless Inc. All rights reserved. Rev 1.3