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

**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 >3.5
  - L1 >4.5
  - G1 >5
  - Iridium >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


**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.