



A Tallysman Accutenna® TW2643A Active Magnet Mount Iridium® / GNSS Antenna

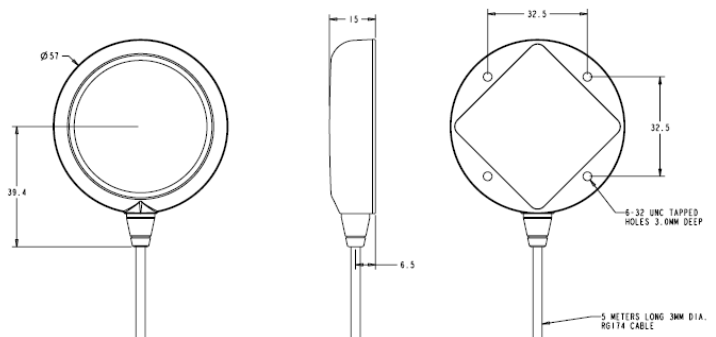
The TW2643A employs Tallysman's unique *Accutenna* technology in a magnet mount, active right hand circularly polarized antenna for the **reception** of all of the GNSS constellations (GPS L1/GLONASS G1/ Galileo E1/ BeiDou B1) plus Iridium: 1559 to 1626.5 MHz frequency band. It is designed to ONLY receive the GNSS and Iridium signals (not transmit). This antenna is uniquely designed for indoor timing applications relying upon both GNSS and Iridium's PNT signal.

The TW2643 features a high performance dual-feed patch element that provides great axial ratio (4dB max, <2dB @ 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 TW2643 is housed in a compact, industrial-grade weather-proof, magnet mount enclosure, with threaded base holes for screw down attachment.



TW2643 Dimensions (mm)



Applications

- Iridium™ PNT applications+ GNSS
- Timing (indoor and outdoor)
- Fleet Management & Asset Tracking
- Marine & Avionics Systems
- Law Enforcement & Public Safety

Features

- Custom high gain, 5 dBic dual-feed patch
- Great axial ratio, <2dB 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



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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)

≤2 dB

Electrical

Frequency Bandwidth

1559 to 1626.5 MHz

Polarization

RHCP

LNA Gain

26dB (min)

Input voltage

2.5-12VDC

Current

18mA

Cross Polarization Rejection

typically 20dB

VSWR (at antenna)

<1.5:1 typ

ESD Circuit protection

15 KV air discharge

Noise Figure

1.5dB typ.

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, REACH, RED, 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

TW2643A – Active Iridium™ + GNSS antenna,

33-2643A-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



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Certified Company

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