



A Tallysman Accutenna® TW2605 Embedded Iridium™ Certified Antenna

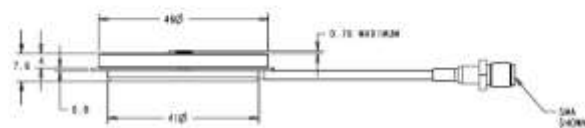
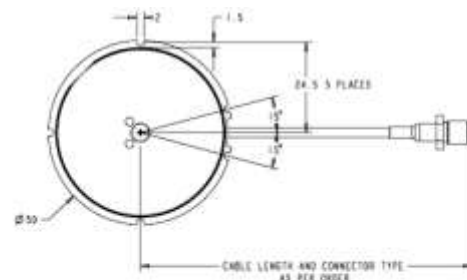
The TW2605 employs Tallysman's unique *Accutenna* technology in an embedded, passive right hand circularly polarised antenna for the 1616 to 1626.5 MHz frequency band, certified and specially designed to maximise the performance of Iridium™ voice and data modems.

The TW2605 features a high performance dual-feed patch element that provides great axial ratio (3dB max) over the entire Iridium™ frequency band, thus signals at the band edges remain truly circular, unlike the response of single feed antennas.

The TW2605 provides excellent Iridium™ signal coverage, and comes in a compact circular form factor with a built-in 50 mm diameter ground plane. Standard coax cable is 15cm of RG174. Custom tuning, cable length, and connectors are available on request.



TW2605 Dimensions (mm)



Applications

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

Features

- Custom high gain 4.25 dBic dual-feed patch
- Great axial ratio, 3 dB over full bandwidth
- 15 KV ESD circuit protection
- Robust design
- Small form factor
- Available application specific tuning

Benefits

- Excellent circular polarized signal transmission
- Industrial temperature range
- Rugged Design
- RoHS compliant



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Specifications

Vcc = Over full bandwidth, T=25°C

Antenna

Architecture	Dual, quadrature feeds
Antenna Gain (100mm ground plane)	4.25 dBic
Axial Ratio (over full bandwidth)	≤3 dB
Radiated Bandwidth (-0.5 dB)	1605 MHz to 1635 MHz

Electrical

Architecture	Hybrid 90° phase signal splitter
Frequency Bandwidth	1616 to 1626.5 MHz
Polarization	RHCP
Cross Polarization Rejection	typically 20dB
Gain flatness	≤0.5 dB, from 1616 to 1626.5 MHz
VSWR (at antenna)	<1.5:1 typ. 1.8:1 max.
Return Loss Bandwidth (10 dB return loss)	>20 MHz
ESD Circuit protection	15 KV air discharge

Mechanicals & Environmental

Mechanical Size	50 mm dia. x 7.8 mm H
Cable	RG174 / 15 cm, custom lengths optional
Operating Temp. Range	-40 to +85 °C
Weight	100 g
Attachment Method	Adhesive or Screw Mount
Environmental	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

TW2605 - Iridium™ antenna, 33-2605-xx-yyyy-zz

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 +1613 591 3131

Fax 613 591 3121

sales@tallysman.com

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