



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.

Applications

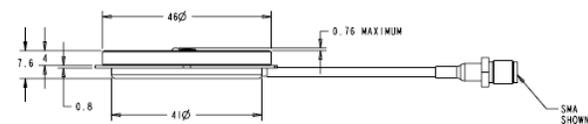
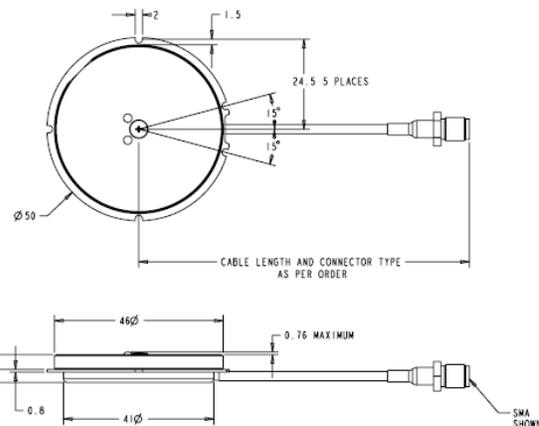
- Iridium™ Voice and Data Applications
- Sea & Land Container Tracking
- Military & Security
- Fleet Management & Asset Tracking
- Marine & Avionics Systems
- Law Enforcement & Public Safety

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



TW2605 Dimensions (mm)



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
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

Legacy Part Number:

TW2605 - Iridium™ antenna: 32-2605-xx-yyyy-zz

Where xx = connector type, yyyy = cable length in mm and zz = custom tuning number (assigned by Tallysman)

* As a result of a growing product portfolio, Tallysman has rationalized its part number system. No changes have been made to the mechanical or electrical properties of these products. Where administratively possible, please use the following Part Numbers.

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

Please refer to the Ordering Guide (<http://www.tallysman.com/orderingguide.php>) for the current and complete list of available connectors.

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