# TW2605



#### When precision matters.®

### TW2605 Embedded Iridium™ Certified Antenna

Frequency Coverage: Iridium

#### **Overview**

The TW2605 employs Tallysman's patented Accutenna® technology in an embedded, passive right-hand circularly polarised antenna for the 1616 MHz 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 (3.0 dB max) over the entire Iridium<sup>™</sup> frequency band, thus signals at the band edges remain truly circular, unlike the response of single-feed antennas.

The TW2605 provides excellent Iridium<sup>™</sup> signal coverage and comes in a compact circular form factor with a built-in 50 mm diameter ground plane.

Custom tuning, cable length, and connectors are available on request.



#### Applications

- Iridium<sup>™</sup> Voice and Data Applications
- Sea & land container tracking
- Safety & 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, 3.0 dB over full bandwidth
- 15 kV ESD circuit protection
- Small form factor
- Available application specific tuning
- RoHS, REACH and CE compliant

#### Benefits

- Excellent circular polarized signal transmission
- Industrial temperature range
- Rugged design

About Tallysman: With global headquarters and manufacturing in Ottawa, Canada, Tallysman is a leading manufacturer of highprecision antennas and components for Global Navigation Satellite System (GNSS) applications. Tallysman's mission is to support the needs of a new generation of positioning systems by delivering unprecedented antenna precision at competitive prices. Learn more at www.tallysman.com

Contact us: info@tallysman.com T: +1 613 591-3131

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#### Antenna Technology

Dual-feed RHCP ceramic patch

|                                       |     | Gain                | Axial Ratio  |
|---------------------------------------|-----|---------------------|--------------|
|                                       |     | dBic typ. at Zenith | dB at Zenith |
| ISS                                   |     |                     |              |
| GPS / QZSS                            | L1  | -                   | -            |
|                                       | L2  | -                   | -            |
|                                       | L5  | -                   | -            |
| GLONASS                               | G1  | -                   | -            |
|                                       | G2  | -                   | -            |
|                                       | G3  | -                   | -            |
|                                       | E1  | -                   | -            |
| Galileo                               | E5A | -                   | -            |
| Galileo                               | E5B | -                   | -            |
|                                       | E6  | -                   | -            |
| BeiDou                                | B1  | -                   | -            |
|                                       | B2  | -                   | -            |
|                                       | B2a | -                   | -            |
|                                       | B3  | -                   | -            |
| IRNSS / NavIC                         | L5  | -                   | -            |
| QZSS                                  | L6  | -                   | -            |
| L-Band Services (1525 MHz - 1559 MHZ) |     | -                   | -            |
| tellite Communications                |     |                     |              |
| Iridium                               |     | 4.25                | ≤ 3          |
| Globalstar                            |     | -                   | -            |
| her                                   |     |                     |              |
| Axial Ratio at 10°                    | -   | Efficiency          | -            |
| PC Variation                          | -   |                     |              |

#### Mechanicals

| Size   | 49.7 mm (dia.) x 7.1 mm (h.) |
|--------|------------------------------|
| Weight | 100 g                        |
| Radome | -                            |
| Mount  | -                            |

#### Environmental

| Operating Temperature | -40 °C to +85 °C                           |
|-----------------------|--|
| Storage Temperature   | -  |
| Vibration             | MIL-STD-810-D                              |
| Shock                 | Vertical axis: 50 G, other axes: 30 G      |
| Salt Fog              | -  |
| IP Rating             | Not Applicable                             |
| Compliance            | IPC-A-610, FCC, RED / CE Mark, RoHS, REACH |
|                       |  |

#### Warranty:

Parts and Labour

One year (extended warranty available)

 Frequency Bandwith
 Out of Band Rejection

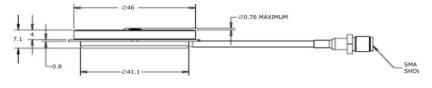
 Upper Band
 Lower Band

 1616 - 1626 MHz

| Architecture           | Non pre-filtered       |
|------------------------|------------------------|
| Gain                   | -                      |
| Noise Figure           | -                      |
| VSWR                   | < 1.5:1 typ. 1.8:1 max |
| Supply Voltage Range   | -                      |
| Supply Current         | -                      |
| ESD Circuit Protection | 15 kV air discharge    |
| P 1dB Output           | -                      |
| Group Delay            | -                      |

Low Noise Amplifier (LNA) - Measured at 3V and 25°C

# C49.7



#### **Ordering Information**

Part Number

#### 33-2605-xx-zzzz

Where xx = type of connector | zzzz = cable length in mm

Please refer to our **Ordering Guide** to review available radomes and connectors at: https://www.tallysman.com/resource/tallysman-ordering-guide/

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