# TW5262



# TW5262 Smart GNSS Antenna

### Overview

The TW5262 is a multi-constellation GNSS Receiver/Antenna fused with inertial sensor data. It is an easy-to-use tracking solution that enables high performance positioning in places where GNSS signals are poor or not available.

The TW5262 incorporates a latest generation GNSS receiver that supports simultaneous GPS/Galileo/GLONASS (GLONASS or Beidou) reception and a Tallysman's Accutenna™ patch antenna. This dual feed antenna greatly improves rejection of multi-path signal interference, making it the most precise antenna for tracking in dense urban environments.

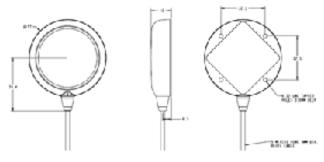
# **Untethered Dead Recknoning (UDR)**

The TW5262 Untethered Dead Reckoning (UDR) technology provides continuous navigation without requiring speed information from the vehicle. This innovative technology brings the benefits of dead reckoning to installations previously restricted to using GNSS alone, significantly reducing the cost of installation for Dead Reckoning applications.

The strength of UDR is particularly apparent under poor signal conditions, where it brings continuous positioning in urban environments, even to devices with antennas installed within the vehicle. Useful positioning performance is also available during complete signal loss, for example in parking garages or short tunnels. UDR positioning starts as soon as the ignition signal is applied and before the first GNSS fix is available.

The TW5262 may be installed in any position in a vehicle without electrical connection to the vehicle speed sensor. The on-board accelerometer and gyroscope sensors result in a self-contained UDR which is self calibrating and provides reliable and consistent navigation.





Mechanical Dimensions (mm)

#### **Features**

- Complete positioning solution with integrated 3D sensors
- Positioning accuracy in dense cities and covered areas
- Independent of any electrical connection to the car
- 5V-36V automotive operation
- Excellent multi-path signal rejection
- Industrial grade IP67 enclosure
- · RoHS, REACH, RED compliant. CE marking

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## **Specifications**

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Architecture......Dual Feed
Axial Ratio .....< 1 dB typical.

Interface

Pwr, Gnd Ignition In

Tx, RX .......RS232 levels

Mechanical

Mounting Method ...............Magnetic Mount

weatherproof IP67

Electrical

Voltages . . . . . . . . . . . . . . . . 5 V to 36 VDC

Current ......50 mA during acquisition

40 mA operating

#### Environmental

Operating Temperature. ....-40°C to +85°C Storage Temperature. ...-45°C to +85°C

Shock......Vertical axis 50G, other axis 30G

3 axis sweep – 15 min
Vibration......10-200 Hz log sweep 3G

Sensitivity

 Tracking & Nav
 -160 dBm 1

 Cold starts
 -148 dBm

 Hot starts
 -157 dBm

Acquisition

Cold start .......26 sec

Aided 3 sec

Position

Position Accuracy......2.5m CEP

UDR Position Error.....Typically <10% of distance covered

without GNSS (up to 60 s)

Serial Protocol

Update Rate......Configurable up to 30Hz

# **Ordering Information:**

32-5262-7-10-05-ccc

ccc= Custom Configuration (Contact Tallysman for "Custom" details e.g. configuration, radio cable type.

e.g. PCO = NMEA out, no adaptor cable

TC4 = Tait NMEA, 27-0118-1 radio cable

**TW5262 Configuration Cable** 

27-0117-1

Please refer to the Ordering Guide for the current and complete list of available products.



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