

# 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.

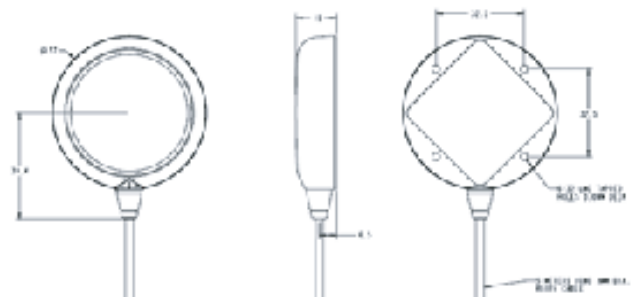
The TW5262 incorporates a latest generation GNSS receiver that supports simultaneous GPS/Galileo/GLONASS (GLONASS or Beidou) reception and a Tallysman's Accutenna™ patch antenna. This dual feed antenna greatly improves rejection of multi-path signal interference, making it the most precise antenna for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

### Untethered Dead Reckoning (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

Antenna	Environmental
Architecture .....Dual Feed	Operating Temperature. ....-40°C to +85°C
Axial Ratio .....< 1 dB typical.	Storage Temperature.....-45°C to +85°C
Frequencies.....GPS/QZSS L1 C/A, GLONASS L10F BeiDou B1I, Galileo E1B/C	Weatherproof .....IP67
SBAS L1 C/A.....WAAS, EGNOS, MSAS, GAGAN	Shock. ....Vertical axis 50G, other axis 30G 3 axis sweep – 15 min
Channels.....72-channel u-blox M8 engine	Vibration.....10-200 Hz log sweep 3G
Interface	Sensitivity
Pwr, Gnd	Tracking & Nav .....-160 dBm 1
Ignition In	Cold starts .....-148 dBm
Tx, RX .....RS232 levels	Hot starts .....-157 dBm
Mechanical	Acquisition
Dimensions .....57 mm dia. x 15 mm H	Cold start .....26 sec
Weight .....130 g	Aided 3 sec
Mounting Method .....Magnetic Mount	Reacquisition .....<1 sec
Cable Length.....5 m with RJ12 termination	Position
Enclosure .....Industrial grade magnetic mount weatherproof IP67	Position Accuracy. ....2.5m CEP
Electrical	UDR Position Error.....Typically <10% of distance covered without GNSS (up to 60 s)
Voltages .....5 V to 36 VDC	Serial Protocol
Current .....50 mA during acquisition 40 mA operating	Output. ....NMEA 0183
	Baud Rate.....Configurable
	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.

**About Tallysman:** With global headquarters and manufacturing in Ottawa, Canada, Tallysman is a leading manufacturer of high-precision 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](http://www.tallysman.com)

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