

# TW5352

## TW5352 Smart GNSS Antenna

### Overview

The TW5352 is a multi-constellation GNSS Receiver which provides simultaneous GPS/GLONASS + SBAS reception. It is designed for use in professional grade digital tracking/positioning applications.

The TW5352 GNSS Smart Antenna uses a state of the art multi-constellation GNSS receiver which provides 72 high sensitivity tracking channels which can be configured to acquire and track 3 concurrent GNSS constellations (GPS, Galileo, GLONASS and Beidou) plus SBAS (WAAS, EGNOS, MSAS and GAGAN) and QZSS augmentation signals simultaneously. Differential GPS corrections may also be supplied via RTCM formatted corrections messages.

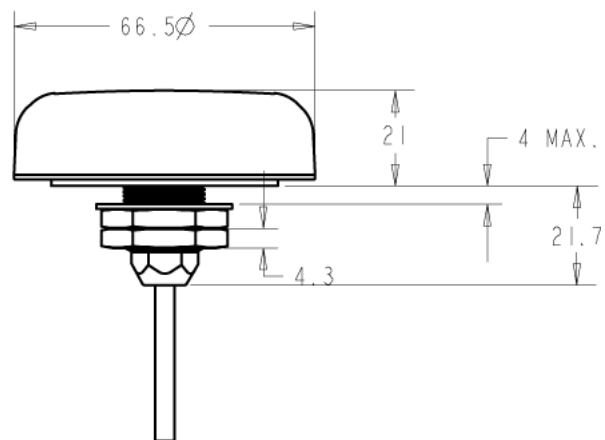
The TW5352 employs Tallysman's Accutenna™ dual feed antenna patch technology which greatly improves rejection of multi-path signal interference, across the whole GNSS band. The addition of pre- and post- filtering within the RF signal chain greatly improves immunity to jamming carriers typical within urban environments.

The TW5352 can be configured to output a variety of NMEA 0183 message lists with navigation update rates up to 5Hz. An RS232 interface is provided for data communication with input voltage range from 5V to 36V suitable for Automotive applications.

Tallysman's Windows™ based Configurator enables simple configuration of parameters such as baud rates, output message rates, constellation, tracking parameters.

### Interface

The TW5352 has a 5 meter cable terminated in RJ45 connector. Adaptor cables are available to interface to for a variety of Two-Way radios, PC, etc contact Tallysman for details.



Mechanical Dimensions (mm)

### Features

- Multi-Constellation Receiver/Antenna
- Concurrent tracking of 3 constellations
- 72 Channel simultaneous operation
- High performance tracking (-164 dBm)
- WAAS, EGNOS, MSAS & GAGAN + QZSS
- DGPS corrections using RTCM input
- Navigation rates 1 to 5 Hz
- Conditioned ignition input for Tait Radios
- 5V to 36V automotive operation
- Accutenna™ Technology
- Pre- and Post- LNA filtering
- Superior multi-path signal rejection
- Industrial grade IP69K enclosure
- RoHS, Reach, RED compliant, CE Marking

# TW5342 Smart GNSS Antenna

## Specifications

<b>Antenna</b>		<b>Sensitivity</b>	
Architecture	.Dual Feed	Tracking & Nav	.....-164 dBm 1
Axial Ratio	.....< 1 dB typical.	Cold starts	.....-148 dBm
Frequencies	.....GPS/QZSS L1 C/A, GLONASS L10F BeiDou B1I, Galileo E1B/C	Hot starts	.....-157 dBm
SBAS	.....WAAS, EGNOS, MSAS, GAGAN	<b>Acquisition</b>	
Channels	.....72-Channel u-blox M8 engine	Cold start	......26 sec
<b>Interface</b>			Aided 3 sec
Pwr, Gnd		Reacquisition	......1 sec
Tx, RX	.....RS232	<b>Accuracy</b>	
<b>Mechanical</b>		Position Accuracy	......2.5m CEP (Horizontal)
Dimensions	......66.5 mm dia. x 21 mm H	Velocity Accuracy	......0.05 m/s
Weight	......135 g	Heading Accuracy	......0.3 deg
Mounting Method	.....Fixed Mount	<b>Operational Limits</b>	
Cable Length	......5 m with RJ45 termination	Dynamics	......4 g
Enclosure	.....Industrial weatherproof IP69K	Altitude	......50,000 m
<b>Electrical</b>		Velocity	......500 m/s
Voltages	......5 V to 36 VDC	<b>Serial Protocol</b>	
Current	.....<500 mW nominal Operating	Output	.....NMEA 0183
<b>Environmental</b>		Input	.....RTCM
Operating Temperature	.....-40°C to +85°C	Baud Rate	.....Configurable up to 230400 bps
Storage Temperature	.....-45°C to +85°C	Update Rate	.....Configurable up to 5Hz
Weatherproof	.....IP69K		
Shock	.....Vertical axis 50G, other axis 30G 3 axis sweep – 15 min		
Vibration	......10-200 Hz log sweep 3G		

## Ordering Information:

33-5352-7-yy-05-ccc

yy= Radome (10= Grey low profile, 11= White low profile)

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

e.g. PC0= NMEA out, No Adaptor cable TC5= Tait NMEA, 27-0028-0 radio cable

### DB9 Configuration Adaptor

**27-0117-0**

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



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