

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.

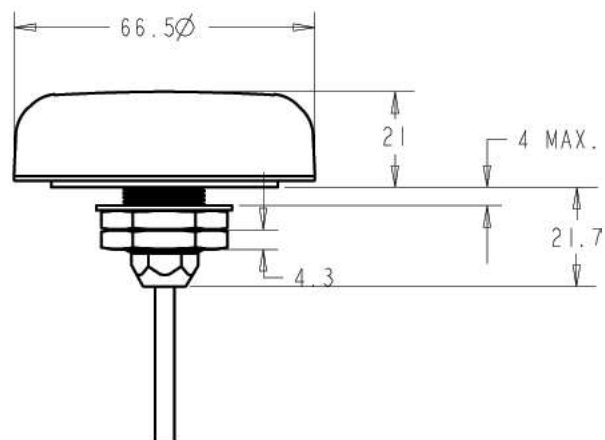
The TW5352 employs Tallysman's Accutenna™ dual feed antenna patch technology which greatly improves rejection of multi-path signal interference, across the whole GNSS band. The addition of pre- and post- filtering within the RF signal chain greatly improves immunity to jamming carriers typical within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

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Specifications

Antenna	Sensitivity
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	Acquisition
Channels 72-Channel u-blox M8 engine	Cold start26 sec
Interface	Aided 3 sec
Pwr, Gnd	Reacquisition1 sec
Tx, RXRS232	Accuracy
Mechanical	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	Operational Limits
Cable Length 5 m with RJ45 termination	Dynamics4 g
Enclosure Industrial weatherproof IP69K	Altitude 50,000 m
Electrical	Velocity 500 m/s
Voltages 5 V to 36 VDC	Serial Protocol
Current <500 mW nominal Operating	Output NMEA 0183
Environmental	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

27-0124-0

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



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Tallymatics manufactures high performance, telematics products and solutions for a wide range of applications. With support for both RF wireless and data networks, Tallymatics enables high-resolution location awareness of mobile field assets across any type of wireless network. Tallymatics is a division of Tallysman.

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