

TW5342



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TW5342 Smart GNSS Antenna

Overview

The TW5342 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 TW5342 uses a state of the art ST STA8088 receiver which provides 32 high sensitivity tracking channels plus 2 fast acquisition channels which can be assigned to acquire and track GPS, GLONASS, QZSS, and SBAS (WAAS, EGNOS, MSAS) signals simultaneously.

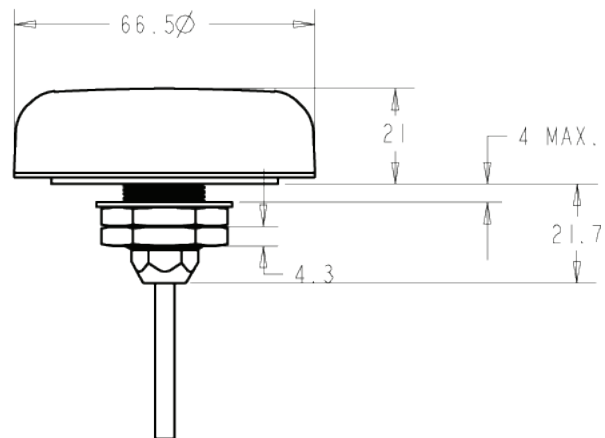
The TW5342 employs Tallysman's Accutenna™ dual feed antenna patch technology which greatly improves rejection of multi-path signal interference, making it the most precise antenna for tracking in dense urban environments.

The TW5342 output NMEA 0183 messages lists with navigation update rate of 1Hz. It has a RS232 interface, and 9V to 36 V operation 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 TW5342 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
- 32 Channel simultaneous operation
- High performance tracking (162 dBm)
- Conditioned ignition input for Tait Radios
- 12V to 36V automotive operation
- Excellent multi-path signal rejection
- Industrial grade IP69K enclosure
- RoHS, Reach, RED compliant, CE Marking

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Specifications

Antenna

ArchitectureDual Feed
Axial Ratio< 1 dB typical.
Frequencies.....GPS / GLONASS / QZSS
SBASWAAS, EGNOS, MSAS
Channels.....32 simultaneous plus 2 fast acquisition
Navigation Accuracy
GPS+GLONASS1.55m (50% CEP)

Interface

Outputs.....Pwr, Gnd, Tx, Ignition sense
InputsRx, Ignition
RS232

Mechanical

Dimensions19mm diameter (¾")
Weight.....180 g
Mounting MethodThru-Hole Mount
Cable Length.....5 m with RJ45 termination
EnclosureIndustrial grade weatherproof IP67

Electrical

Voltages9 V to 36 VDC
Current50 mA during acquisition
40 mA operating

Environmental

Operating Temperature.....-40°C to +85°C
Storage Temperature.....-45°C to +85°C
WeatherproofIP69K
Shock.....Vertical axis 50G, other axis 30G
3 axis sweep – 15 min
Vibration.....10-200 Hz log sweep 3G

Sensitivity

Acquisition.....-146 dBm
Tracking-162 dBm

Time to First Fix

Cold start35 sec
Warm start30 sec
Hot start<2 sec
Reacquisition<1 sec

Serial Protocol

Output.....NMEA 0183
Baud Rate.....Configurable
Update Rate.....Configurable up to 10Hz
Constellations

Ordering Information:

33-5342-6-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 TC3= Tait NMEA, 27-0028-0 radio cable

TC3= Tait NMEA

27-0028-0 Radio Cable

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



TALLYMATICS®

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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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