# GPS/AVIATION SPECIAL PURPOSE ANTENNAS GPS Timing Reference Antennas

GPS Timing Antenna with Receiver (top); bottom view (inset)



# GPS Timing, 40dB With Integrated Receiver And Integrated Lightning Protection

#### Features

- Integrated GPS antenna and receiver in one rugged housing
- Quadrifiliar helix element for optimal coverage and multipath rejection
- Embedded low noise amplifier with preselector and interstage filter for minimizing interference
- Low power consumption (500 mW typical)
- Input voltage 8-12 V
- Lighting Protection Compliance per EN61000-4-5 Level 4

### **Antenna Specifications**

Frequency Band	Antenna Gain	Polarization
1575.42 +/- 10 MHz	4 dBic (Quadrifiliar Helix)	Right hand circular (RHCP)

# **Receiver Specifications**

General	Update Rate	Accuracy
L1 (1575.42 MHz) frequency, C/A code,12-channel, continuous tracking receiver	NMEA@ 1 Hz	Horizontal: <3 m (50%), <8 m (90%) Altitude: <10 m (50%), <16 m (90%) PPS (static): ± 50 nanoseconds

Acquisition (Autonomous Operation)	Sensitivity	PPS	Protocols	Interface
Reacquisition: 2 sec typical Hot start: 9 sec typical Warm Start: 36 sec typical Cold Start: 39 sec typical Out of the Box: 41 sec typical	Tracking: -150 dBm Acquisition: -142 dBm	Once per second TTL-level pulse (RS232 only) Differential pulse (RS422 only)	NMEA 0183 v3.0 Bi-directional NMEA messages Messages selectable by NMEA commands Selection stored in flash memory	RS232 or RS422 options

# **Mechanical Specifications**

Antenna Dimensions	Shipping Dimensions	Antenna Weight	Shipping Weight	Radome Color	Connector
5.0" H x 3.2" D (126 H x 81 mm)	7.5" L x 4.4" W x 3.8" D (190 L x 112 x 96 mm)	0.6 lbs (0.3 kg)	1.9 lbs (0.9 kg)	White	8-pin circular connector conforming IEC 60130-9.v3.0

## **Environmental Specifications**

Operating Temperature	Humidity	Ingress Protection
- 40°C to + 85°C	95%	IP67

#### Model Numbers

All mounting options fit pipes of 1"-1.45" (25 mm-37 mm) maximum diameter.

RS232 Interface Models	RS422 Interface Models	Description
GPS-TMG-RCVR232	GPS-TMG-RCVR422	Timing antenna (does not include mounting hardware).
GPS-TMG-RCVR232NLM	GPS-TMG-RCVR422NLM	Timing antenna includes L-bracket mount (GPS-TMG-LMNT)
GPS-TMG-RCVR232NCB	GPS-TMG-RCVR422NCB	Timing antenna includes heavy duty mount (GPS-TMG-HDMNT)