



# Trimble Zephyr 3 Rugged Antenna

PRECISE AND DURABLE WITH MILLIMETER ACCURACY

The newly improved Zephyr 3 Rugged antenna is smaller and lighter than its Zephyr 2 Rugged predecessor. The Trimble Zephyr 3 Rugged antenna is designed for applications in high shock and vibration environments. Integrated with advanced filtering capabilities and robust signal tracking, the Zephyr 3 Rugged can provide the millimeter level accuracy required to enhance your position solution.

## COMPREHENSIVE GNSS SUPPORT

The Trimble Zephyr 3 Rugged antenna offers full support for current and near-future GNSS signals including GPS, GLONASS, Galileo, BeiDou, QZSS, IRNSS, OmniSTAR, Trimble RTX and SBAS.

### Features of the Zephyr 3 Rugged:

- Additional Iridium filtering above 1616 MHz allows antenna to be used as close as 20 m of Iridium transmitter
- Additional filtering below 1510 MHz allows for antenna placement closer to Japanese LTE cell tower
- Advanced LNA (low noise amplifier) to reduce interference by high power out-of-band transmitters
- 50 dB signal gain for reliable tracking in challenging environments and long cable runs
- Two product versions available for 5/8" - 11" thread and 3" mast mounting

## Key Features

- ▶ Comprehensive GNSS support, including GPS Modernization signals, GLONASS, BeiDou and Galileo
- ▶ Robust low-elevation satellite tracking
- ▶ Millimeter phase center repeatability
- ▶ Improved signal filtering and multipath rejection
- ▶ Additional Iridium and Japanese LTE filtering
- ▶ High signal gain (50 dB) for reliable tracking
- ▶ 75g Shock



Picture 1: Zephyr 3 with 5/8" Mounting  
 PN 125000-30-INT



Picture 2: Zephyr 3 with 3" Mast Mounting  
 PN 125000-10-INT

# Trimble Zephyr 3 Rugged Antenna

## TECHNICAL SPECIFICATIONS

- Comprehensive GNSS Tracking:
  - GPS: L1, L2, L5
  - GLONASS: L1, L2, L3
  - BeiDou: B1, B2, B3
  - Galileo: E1, E5a, E5b, E6
  - QZSS: L1, L2, L5, LEX
  - IRNSS: L5
  - SBAS: WAAS, EGNOS, GAGAN, and MSAS
  - MSS: OmniSTAR, Trimble RTX
- Quality signal tracking, even at low elevations
- Four point antenna feed for phase center stability and enhanced polarization

## ENVIRONMENTAL QUALIFICATIONS

Operating Temperature .. -40 °C to +85 °C (-40 °F to +185 °F)  
 Humidity ..... IP69K, +/- 5psi Sealing Spray per IEC 60945

Environmental  
 Shock ..... 75G, 6ms  
 Vibration ..... 20.4 gRMS  
 Bouyant

Compliance ..... CE compliant including ISO 13766:2006, 2014/45/EU (RED), EN 60950, E-Mark and RoHS, FCC, IC and RCM compliant

## PHYSICAL AND ELECTRICAL SPECIFICATIONS

Dimensions  
 125000-10-INT. .... 21.9 cm diameter x 12.5 cm height (8.62 in diameter x 4.92 in height)  
 125000-30-INT. .... 18.7 cm diameter x 8.6 cm height (7.36 in diameter x 3.39 in height)

Weight  
 125000-10-INT. .... 2.19 kg (4.83 lb)  
 125000-30-INT. .... 1.79 kg (3.95 lb)

Input Voltage ..... 3.5 V DC to 20 V DC  
 MSS Narrow Band Mode (1555 to 1559 MHz): >6.4 V DC to 9 V DC  
 MSS Wide Band Mode (1525 to 1559 MHz): 3.5 V DC to 6.0 V DC and 9.4 V DC to 20 V DC

Input Current ..... 125 mA  
 Signal Gain ..... .50 dB  
 Signal Connector ..... TNC Sealed  
 Mounting ..... 5/8" - 11 Thread or 3" Mast Mount

## PART NUMBERS

125000-10-INT ..... Zephyr 3 Rugged Antenna with 3" Mast Mount Bracket  
 125000-30-INT ..... Zephyr 3 Rugged Antenna with 5/8" Mounting Bracket

Specifications subject to change without notice

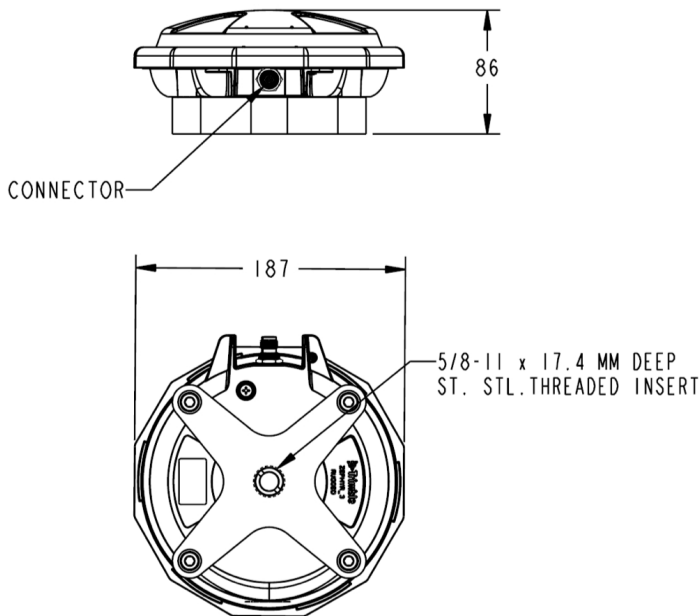


Figure 1: Technical Drawing of Zephyr 3 with 5/8" Mounting  
 PN 125000-30-INT

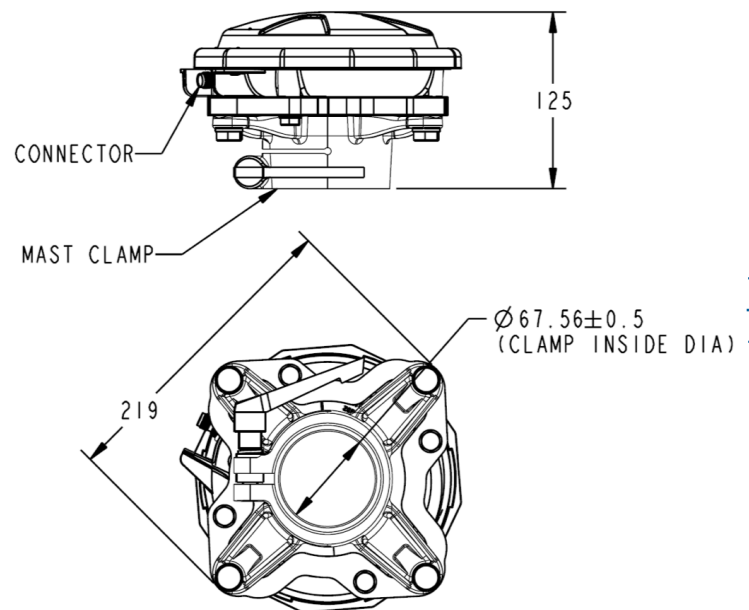


Figure 2: Technical Drawing of Zephyr 3 with 3" Mast Mounting  
 PN 125000-10-INT

TRIMBLE  
 Worldwide  
 Integrated Technologies  
 510 DeGuigne Drive  
 Sunnyvale, CA 94085

**NavtechGPS** Contact NavtechGPS for product details. [www.NavtechGPS.com](http://www.NavtechGPS.com)  
 +1-703-256-8900 • 800-628-0885 • [info@navtechgps.com](mailto:info@navtechgps.com)

© 2018, Trimble, Inc. All rights reserved. Trimble logo are trademarks of Trimble, registered in the United States and in other countries. All other trademarks are the property of their respective owners. (07/2018)