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 nearfuture 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

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- 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

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



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

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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

Trimble Zephyr 3 Rugged Antenna

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
125000-30-INT 1.79 kg (3.95 lb) Input Voltage
MSS Narrow Band Mode (1555 to 1559 MHz): >6.4 VDC to 9 VDC
MSS Wide Band Mode (1525 to 1559 MHz):
3.5 VDC to 6.0 VDC and 9.4 VDC to 20 VDC
Input Current 125 mA
Signal Gain
Signal Connector TNC Sealed
Mounting

L1 Nominal Phase Center Values

The offset value for the Zephyr 3 Rugged L1 nominal phase center have changed compared to the Zephyr 2 antenna. Make sure your system is updated to reflect the correct offset as shown.

Description	L1 APC Offset
Bottom of 4-hole bracket (Top of mast when using mast mounting bracket)	7.16 cm
Bottom of 5/8 bracket	8.43 cm
Bottom of antenna mount	5.89 cm
Bottom of RZ2 matched 4-hole bracket	10.04 cm

Specifications subject to change without notice

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



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

-5/8-11 x 17.4 MM DEEP ST. STL.THREADED INSERT

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

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Contact your local dealer today

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CONNECTOR

