



Trimble Zephyr 3

ANTENNAS

PRECISE AND DURABLE WITH SUB-MILLIMETER ACCURACY

The top of the range Trimble® Zephyr™ external GNSS antennas contain advanced technology for multipath reduction, outstanding low elevation satellite tracking and sub-millimeter phase center stability.

COMPREHENSIVE GNSS SUPPORT

The Trimble Zephyr 3 antennas offer full support for current and near-future GNSS signals including GPS, GLONASS, Galileo, BeiDou, OmniSTAR, Trimble RTX and SBAS. Combined with rugged durability, the Trimble Zephyr 3 antenna will be a long term investment.

TRIMBLE ZEPHYR 3 ROVER

The Trimble Zephyr 3 Rover is a high-performance lightweight GNSS rover antenna optimized for precision RTK applications. The Zephyr 3 Rover GNSS antenna is typically used in roving applications. It minimizes multipath and offers robust low elevation tracking and sub-millimeter phase center repeatability.

Key features of the Zephyr 3 Rover

- ▶ Optimized for GNSS rover applications
- ▶ Robust low-elevation satellite tracking
- ▶ Minimized multipath
- ▶ Sub-millimeter phase center repeatability
- ▶ Now with Iridium and Japanese LTE filtering

TRIMBLE ZEPHYR 3 BASE

The Zephyr 3 Base is recommended for all base station applications. The Zephyr 3 Base antenna's quality performance and extreme accuracy are achieved through sub-millimeter phase center repeatability, robust low-elevation tracking and significantly reduced ground-based multipath.

Key features of the Zephyr 3 Base:

- ▶ Optimized for GNSS base station applications
- ▶ Robust low-elevation satellite tracking
- ▶ Large ground plane for best multipath rejection
- ▶ Sub-millimeter phase center repeatability
- ▶ Ideal for fixed reference stations and GNSS infrastructure networks
- ▶ Now with Iridium and Japanese LTE filtering

Key Features

- ▶ Comprehensive GNSS support, including GPS Modernization signals, GLONASS, BeiDou and Galileo
- ▶ Robust low-elevation satellite tracking
- ▶ Minimized multipath
- ▶ Sub-millimeter phase center repeatability
- ▶ Pair with the Trimble R9s GNSS receiver in either a base station or rover configuration
- ▶ Additional Iridium and Japanese LTE filtering
- ▶ High signal gain (50 dB) for reliable tracking
- ▶ 5/8" - 11 stainless steel mounts



Zephyr 3 Rover Antenna



Zephyr 3 Base Antenna



Trimble Zephyr 3 ANTENNAS

TECHNICAL SPECIFICATIONS

Zephyr 3 Rover and Zephyr 3 Base

- Broad GNSS Frequency Tracking Band Including:
 - GPS: L1, L2, L5
 - GLONASS: L1, L2, L3
 - BeiDou: B1, B2, B3
 - Galileo: E1, E2, E5, E6
 - SBAS: WAAS, EGNOS, QZSS, Gagan, MSAS, OmniSTAR and Trimble RTX
- Quality signal tracking, even below 5 degrees elevation
- Four point antenna feed for phase center stability and enhanced polarization
- TNC female signal connector
- Small cross-sectional area to reduce wind loading
- 5/8" - 11 female threaded stainless steel mount point
- Powered by GNSS receiver via coaxial cable
- Advanced LNA (low noise amplifier) to reduce jamming by high power out-of-band transmitters with 50 dB signal gain for reliable tracking in challenging environments and long cable runs
- Additional iridium filtering above 1616 MHz allows antenna to be used as close as 20 m of iridium transmitter
- Additional Japanese filtering below 1510 MHz allows antenna to be used as close as 100 m of Japanese LTE cell tower

Zephyr 3 Base Antenna Only

- Trimble Stealth Ground Plane – integrated lightweight stealth technology with enhanced right hand circular polarization to reduce multipath interference

ENVIRONMENTAL

- Operating Temperature -40 °C to +75 °C (-40 °F to +167 °F)
- Humidity 100% humidity proof, fully sealed
- Shock and Vibration
 - Tested and meets the following environmental standards:
 - Shock MIL-STD-810-F to survive a 2 m (6.56 ft) drop onto concrete
 - Vibration MIL-STD-810-F on each axis
 - Compliance RoHS

PHYSICAL

- Zephyr 3 Rover Dimensions 16.5 cm diameter x 7.6 cm height (6.5 in diameter x 3 in height)
- Zephyr 3 Base Dimensions 34.3 cm diameter x 7.9 cm height (13.5 in diameter x 3.1 in height)
- Zephyr 3 Rover Weight 0.64 kg (1.4 lb)
- Zephyr 3 Base Weight 1.36 kg (3 lb)

ELECTRICAL

- Input Voltage 3.5 V DC to 20 V DC
 - Narrow Band Mode (1555 to 1559 MHz) >6.4 V DC to 9 V DC
 - 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

Contact your local Trimble Authorized Distribution Partner for more information

NORTH AMERICA
Trimble Inc.
10368 Westmoor Dr
Westminster CO 80021
USA

EUROPE
Trimble Germany GmbH
Am Prime Parc 11
65479 Raunheim
GERMANY

ASIA-PACIFIC
Trimble Navigation
Singapore Pty Limited
80 Marine Parade Road
#22-06, Parkway Parade
Singapore 449269
SINGAPORE

