

Trimble Zephyr 2 Antennas

RUGGED AND DURABLE WITH SUB-MILLIMETER ACURACY

The top of the range Trimble® Zephyr™ external GNSS antenna contains advanced technology for multipath reduction, outstanding low elevation satellite tracking, and sub-millimeter phase center stability. The Trimble Zephyr 2, Zephyr 2 Rugged and Zephyr 2 Geodetic antennas offer full support for current and near-future GNSS signals. Combined with its rugged durability, the Trimble Zephyr 2 antenna will be a long term investment.

TRIMBLE ZEPHYR 2

The Trimble Zephyr 2 is a high-performance lightweight GNSS rover antenna optimized for precision RTK applications. The Zephyr 2 GNSS antenna is typically used in roving applications. It minimizes multipath and offers robust low elevation tracking and sub-millimeter phase center repeatability.

TRIMBLE ZEPHYR 2 RUGGED

The Trimble Zephyr 2 Rugged Antenna is intended for installations subject to high shock and vibration on the job site. Ideal for drilling rigs, marine vessels, cranes and other vehicle applications, it offers precise positioning with sub-millimeter phase center accuracy.

Key features of the Zephyr 2 and Zephyr 2 Rugged:

- Optimized for GNSS rover applications
- Robust low-elevation satellite tracking
- Minimized multipath
- Sub-millimeter phase center repeatability

TRIMBLE ZEPHYR 2 GEODETIC

The Trimble Zephyr 2 Geodetic antenna is extremely rugged and ideal for control work. The Zephyr 2 Geodetic is recommended for all base station applications. This antenna is also suitable as a fixed rover antenna for use in high multi-path environments.

The Zephyr 2 Geodetic 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:

- 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

COMPREHENSIVE GNSS SUPPORT

The Trimble Zephyr 2 antennas have the ability to track Modernized GPS signals, GLONASS, Galileo, BeiDou, OmniSTAR and SBAS. The Zephyr 2 antennas are an excellent investment for the future.

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
- ▶ Ideal for fixed reference stations and GNSS infrastructure networks



Zephyr 2 Antenna



Zephyr 2 Rugged Antenna



Zephyr 2 Geodetic Antenna

TRIMBLE ZEPHYR ANTENNA

TECHNICAL SPECIFICATIONS

Zephyr 2, Zephyr 2 Rugged and Zephyr 2 Geodetic Antennas

- 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 and OmniSTAR
- 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
- 13 dB amplifier margin supports cable runs of over 60 m without special coaxial cable or in-line amplifiers
- North orientation marking on exterior
- 50 dB signal gain for reliable tracking in difficult environments
- Low voltage, low power consumption
- Integral low noise amplifier
- 5/8" x 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

Zephyr 2 Geodetic Antenna Only

- Trimble Stealth Ground Plane – integrated lightweight stealth technology with enhanced right hand circular polarization to reduce multipath interference
- Supplementary radome not required (available if desired)

ENVIRONMENTAL QUALIFICATIONS

Operating Temperature –40 °C to +85 °C (–40 °F to +167 °F)

Humidity 100% humidity proof, fully sealed

Input Voltage 3.5 V DC to 20 V DC

Input Current 125 mA maximum

Shock and Vibration Tested and meets the following environmental standards

Zephyr 2 and Zephyr 2 Geodetic

Shock MIL-STD-810-F to survive a 2 m (6.56 ft) drop onto concrete

Vibration MIL-STD-810-F on each axis

Zephyr 2 Rugged

Shock 75 gs, 6 ms duration, 3 shocks in mutually perpendicular axis

Vibration 20.4 gRMS. Bouyant

PHYSICAL SPECIFICATIONS

Dimensions

Zephyr 2 16.5 cm diameter x 7.6 cm height
(6.5 in diameter x 3 in height)

Zephyr 2 Rugged 25.4 cm diameter x 11.1 cm height
(10" diameter x 4.37" height)

Zephyr Geodetic 2 34.3 cm diameter x 7.9 cm height
(13.5 in diameter x 3.1 in height)

Weight

Zephyr 2 0.64 kg (1.4 lb)

Zephyr 2 Rugged 1.8 kg (4 lb)

Zephyr Geodetic 2 1.36 kg (3 lb)

PART NUMBERS

57970-10-INT Zephyr Model 2 L1/L2/L5/G1/G2 Rover

57971-10-INT Zephyr Model 2, L1/L2/L5/G1/G2 Geodetic

66241-00-INT Zephyr Model 2, L1/L2/L5/G1/G2 Rugged

66241-10-INT Zephyr Model 2, L1/L2/L5/G1/G2
Rugged with mast mount bracket

Specifications subject to change without notice.

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