DATASHEET

# TRIMBLE GNSS ANTENNAS

## KEY FEATURES

Comprehensive GNSS support, including GPS Modernization signals, GLONASS, and Galileo

Robust low-elevation satellite tracking

Minimized multipath

Sub-millimeter phase center repeatability

Ideal for fixed reference stations and GNSS infrastructure networks

The new Trimble® Zephyr™ 2 and Zephyr Geodetic™ 2 antennas break new ground in GNSS surveying antenna technology. Both antennas support modular Trimble systems such as the Trimble® R7 GNSS and Trimble® 5700 GPS receivers, and can be used as part of the Trimble GNSS Infrastructure solution.

**TRIMBLE ZEPHYR 2**

The Trimble 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.

A Trimble GNSS rover comprising the rugged Zephyr 2 and a receiver such as the Trimble R7 GNSS is extremely flexible: Attach the antenna to the top of a pole, wear it on the purpose-built Trimble backpack, or drive with the Zephyr 2 mounted on the roof of a vehicle. The Trimble Zephyr 2 supports the way you want to work.

**TRIMBLE ZEPHYR GEODETIC 2**

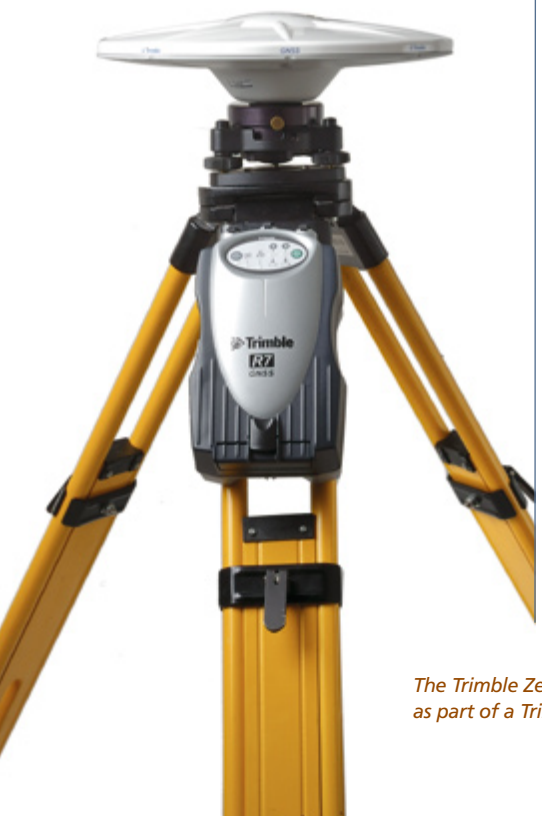
The Trimble Zephyr Geodetic 2 antenna is ideal for control work. The Zephyr Geodetic 2 incorporates a large Trimble Stealth™ Ground Plane, which literally burns up multipath energy using technology similar to that used by Stealth aircraft to hide from radar.

The Zephyr Geodetic 2 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.

The Zephyr Geodetic 2 is extremely rugged. It is protected by weather-resistant materials and a low profile design, so when the antenna is used for a permanent installation, you can count on many years of continuous operation without the need for a radome.

**COMPREHENSIVE GNSS SUPPORT**

The Trimble Zephyr 2 and Zephyr Geodetic 2 antennas offer full support for coming and near-future GNSS signals, including GPS L2C and L5, GLONASS, and even Galileo. This technology future-proofing, in combination with the rugged durability of each antenna, means any investment in a Trimble Zephyr GNSS antenna will last for many years.




*The Trimble Zephyr Geodetic 2 antenna is shown as part of a Trimble R7 GNSS base station.*

Trimble

**PERFORMANCE**

**Trimble Zephyr Geodetic 2 and Trimble Zephyr 2 Antennas**

- Broad GNSS Frequency Tracking Band Including:
  - GPS: L1, L2, L5
  - GLONASS: L1, L2, L3
  - 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 Geodetic 2 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)

**HARDWARE**

Dimensions

| | |
|---|---|
| Zephyr 2 | 16.5 cm diameter x 7.6 cm height (6.5 in diameter x 3 in height) |
| Zephyr Geodetic 2 | 34.3 cm diameter x 7.6 cm height (13.5 in diameter x 3 in height) |
| Weight | |
| Zephyr 2 | 0.64 kg (1.4 lb) |
| Zephyr Geodetic 2 | 1.36 kg (3 lb) |
| Operating Temperature | –40 °C to +70 °C (–40 °F to +158 °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 |
| Input Voltage | 3.5 V DC to 20 V DC |
| Input Current | 125 mA maximum |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*Specifications subject to change without notice.*

*TRIMBLE AUTHORIZED DISTRIBUTION PARTNER*

**NORTH AMERICA**
Trimble Engineering
& Construction Group
5475 Kellenburger Road
Dayton, Ohio 45424-1099 • USA
800-538-7800 (Toll Free)
+1-937-245-5154 Phone
+1-937-233-9441 Fax

**EUROPE**
Trimble GmbH
Am Prime Parc 11
65479 Raunheim • GERMANY
+49-6142-2100-0 Phone
+49-6142-2100-550 Fax

**ASIA-PACIFIC**
Trimble Navigation
Singapore Pty Limited
80 Marine Parade Road
#22-06, Parkway Parade
Singapore 449269 • SINGAPORE
+65-6348-2212 Phone
+65-6348-2232 Fax

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www.trimble.com