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.



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 su	rvive a 2 m (6.56 ft) drop onto concrete
Vibration	MIL-STD-810-F on each axis
Input Voltage	
Input Current	125 mA maximum

© 2007, Trimble Navigation Limited. All rights reserved. Trimble and the Globe & Triangle logo are trademarks of Trimble Navigation Limited, registered in the United States and in other countries. Stealth, Zephyr, and Zephyr Geodetic are trademarks of Trimble Navigation Limited. All other trademarks are the property of their respective owners. PN 022543-381A (07/07)

Specifications subject to change without notice.

FUROPE

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

((C



www.trimble.com

TRIMBLE AUTHORIZED DISTRIBUTION PARTNER

& Construction Group 5475 Kellenburger Road

NORTH AMERICA

Trimble Engineering

Dayton, Ohio 45424-1099 • USA 800-538-7800 (Toll Free) +1-937-245-5154 Phone +1-937-233-9441 Fax