



BULLET III GPS ANTENNA

KEY FEATURES

- Waterproof and corrosion-resistant housing filtering for harsh RF jamming environments
- Proven extra rugged, reliable
- Available in 3.3v (TNC) or 5v (TNC or F)
- RoHS-Compliant (Pb-free)



JAM-RESISTANT ACTIVE GPS ANTENNA NOW AVAILABLE FOR USE WITH 3.3 V DC AND 5 V DC APPLICATIONS

Whatever the environment—the Trimble® Bullet™ III GPS antenna will perform, year after year. The Bullet III antenna provides a perfect solution for manufacturers who need a fixed-site, rooftop GPS antenna. This antenna is also a high-quality solution for adding GPS RF signals for marine GPS navigation systems.

Put it anywhere

The antenna is housed in weatherproof packaging designed to withstand exposure to shock, excessive vibration, extreme temperatures, rain, snow and sunlight.

The dome is all plastic, and the threaded socket in the base of the antenna is corrosion resistant. The threaded socket accepts either a 1"-14" straight thread (typical marine antenna mount) or a 3/4" pipe thread.

The F-type or TNC antenna connector is located inside the threaded socket, which allows the antenna cable to be routed inside a mounting pole and protects the cable connection for added reliability.

Strong performance

The Bullet III antenna is an active GPS antenna with 35 dB preamp (5 V DC), 30 dB preamp (3.3 V DC). The high-gain preamp allows the Bullet III antenna to be used with up to 75 feet of RG-59 cable. The Bullet III filtering improves immunity to other RF signals for reliable performance in hostile RF jamming environments.

Proven reliability

For over 15 years, Trimble has sold GPS antennas renowned for their survivability in tough environments. The Bullet III antenna is the fourth generation of the proven Bullet antenna family and offers all the reliability and performance benefits that are required for GPS installations.

In unforgiving environments, an antenna failure could be disastrous. Don't risk it. Select a proven GPS antenna—the Trimble Bullet III GPS antenna.

BULLET III GPS ANTENNA

ENVIRONMENTAL SPECIFICATIONS

| | |
|--------------------------|---|
| Operating Temp | -40 °C to +85 °C |
| Storage Temp | -40 °C to +100 °C |
| Vibration | 10-200 Hz Log sweep 3 g (Sweep time 30 minutes) 3 axes |
| Shock | 50 g vertical, 30 g all axes |
| Humidity | Mil-STD-810E |
| Corrosion | 5% Salt spray |
| Waterproof | Immersion to 1 meter |

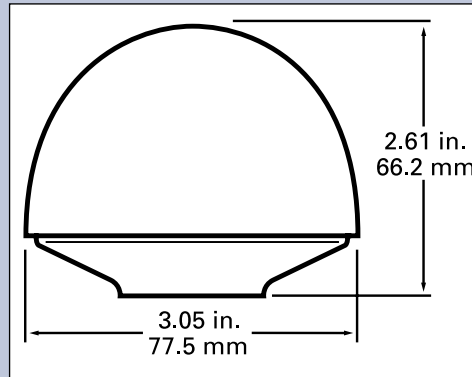
PHYSICAL CHARACTERISTICS - 3.3 V DC AND 5 V DC ANTENNAS

| | |
|----------------------|---|
| Dimensions | 3.05" D x 2.61" H (77.5 mm x 66.2 mm) |
| Weight | 6.0 oz (170 grams) |
| Enclosure | Off-white plastic |
| Connector | F-type & TNC (5 V DC) - TNC (3.3 V DC only) |
| Mounting | 1"-14" thread or 3/4" pipe thread |

TECHNICAL/PERFORMANCE SPECIFICATIONS

| | 3.3v | 5v |
|-----------------------|--|--|
| Prime Power | 3.3 V DC (±10%) | +5 V DC (±10%) |
| Power consumption: | <20 mA | 30 mA maximum |
| Gain | 30 dB @ 25 °C | 35 dB ± 3 dB |
| Output impedance | 50Ω | 50Ω |
| Frequency | 1575.42 MHz ± 1.023 MHz | 1575.42 MHz ± 1.023 MHz |
| Polarization | Right-hand circular polarization (RHCP) | Right-hand circular polarization (RHCP) |
| VSWR | 2.0 maximum | 2.0 maximum |
| Axial ratio | 90°: 4.0 dB maximum; 10°: 6 dB maximum | 90°: 4.0 dB maximum; 10°: 6 dB maximum |
| Noise | 3.3 dB maximum (25 °C ±5 °C) | 3.3 dB maximum (25 °C ±5 °C) |
| Pass-band width | 50 MHz | 50 MHz |
| Out of Band rejection | fo=1575.42 MHz fo ±20 MHz: 7 dB min fo ±30 MHz: 12 dB min fo ±50 MHz: 20 dB min fo ±100 MHz: 30 dB min | fo=1575.42 MHz fo ±20 MHz: 7 dB min fo ±30 MHz: 12 dB min fo ±50 MHz: 20 dB min fo ±100 MHz: 30 dB min |
| Azimuth coverage | 360° (omni-directional) | 360° (omni-directional) |
| Elevation coverage | 0° to 90° elevation (hemispherical) | 0° to 90° elevation (hemispherical) |

MECHANICAL



CONNECTORS



TNC (3.3 V and 5 V)



F-type (5 V only)

ORDERING INFORMATION AND ACCESSORIES

Please go to www.trimble.com/timing for the latest documentation & tools, part numbers and ordering information

Trimble has relied on representations made by its suppliers in certifying this product as RoHS compliant.

Specifications subject to change without notice.

Trimble Navigation Limited is not responsible for the operation or failure of operation of GPS satellites or the availability of GPS satellite signals.

NORTH AMERICA

Trimble Navigation Limited
Corporate Headquarters
935 Stewart Drive
Sunnyvale, CA 94085
Phone: +1-800-787-4225
Phone: +1-408-481-7741
Email: timing@trimble.com

EUROPE

Trimble Navigation Europe
Phone: +49-6142-2100-161

KOREA

Trimble Export Ltd, Korea
Phone: +82-2-555-5361

CHINA

Trimble Navigation Ltd, China
Phone: +86-21-6391-7814

TAIWAN

Trimble Export Limited, Taiwan
Phone: +886-02-85096574

