



BULLET III GPS ANTENNA

KEY FEATURES

- Weatherproof 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 Soak 60°C @ 95% RH, 96 hours
 Corrosion Salt Resistant 5% Salt spray tested, 96 hours

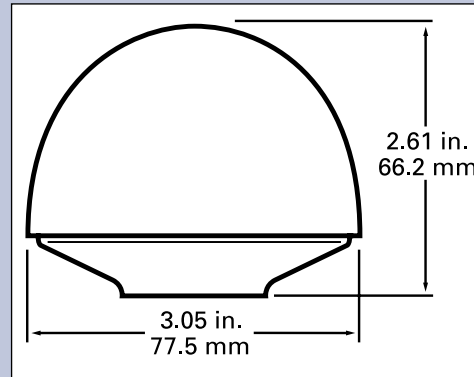
PHYSICAL CHARACTERISTICS - 3.3 V DC AND 5 V DC ANTENNAS

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
Blocking 1 dB Compression Point	100 mhz TO 1.500 GHz >+15dBm 1.5 GHz TO 1.57542 LINEAR DECREASE FROM +15 dBm TO -40 dBm OVER FREQUENCY RANGE 1.57542 GHz TO 1.65 GHz LINEAR INCREASE FROM -40dBm TO +15 dBm OVER FREQUENCY RANGE 1.65 GHz TO 3 GHZ >+15 dBm	100 mhz TO 1.500 GHz >+15dBm 1.5 GHz TO 1.57542 LINEAR DECREASE FROM +15 dBm TO -40 dBm OVER FREQUENCY RANGE 1.57542 GHz TO 1.65 GHz LINEAR INCREASE FROM -40dBm TO +15 dBm OVER FREQUENCY RANGE 1.65 GHz TO 3 GHZ >+15 dBm
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 or 5V)



F-Type (5V 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.

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