Data Sheet

Transforming the Way the World Work

Bullet[™] 40dB Antenna

KEY FEATURES

- GPS L1 with high gain
- Weatherproof housing
- Extended temperature range (-40°C / +90°C)
- High gain 40 ±3dB
- Filtering for RF Jamming environments
- Available in 3.3V (TNC) or 5V (TNC or F)
- RoHS-II Compliant

GPS L1 Band with higher gain

The Trimble[®] Bullet[™] 40dB timing antennas are high gain antennas suitable for long cable runs and noisy RF environments.

In challenging urban RF environments the high antenna gain will significantly improve the performance of GNSS receiver

Put it anywhere

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

The dome is all plastic, and the threaded socket in the base of the antenna. The socket accepts either a $1^{"}-14^{"}$ straight threat (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.

Strong Performance

The Bullet 40dB antenna is an active GPS L1 band antenna with 5V DC and 3.3V DC options. The Bullet 40dB filtering improves impunity to other RF signals for reliable performance in hostile RF jamming environments.



Proven Reliability

For over 25 years, Trimble has sold GNSS antennas renowned for their survivability in tough environments. The Bullet 40dB antenna is the fifth generation of the proven Bullet antenna family and offers all the reliability and performance benefits that are required for mission critical installations.

In unforgiving environments, an antenna failure could be disastrous. Don't risk it. Select a proven GNSS antenna – the Trimble Bullet 40dB antenna.



Bullet[™] 40dB – High Gain GPS L1 Antenna

ENVIRONMENTAL SPECIFIATIONS

Operating Temperatu	re40°C to +90°C	
Storage Temperature.	40°C to +90°C	
Vibration	10 – 200 Hz Log sweep	
	3g (Sweep time 30 minutes) 3 axes	
Shock	50g vertical, 30g all axes	
Humidity Soak	+60°C @ 95% RH, 96 hours	
Corrosion Salt Resistant5% Salt spray tested, 96 hours		

PHYISCAL CHARCTERISTICS – 3.3V & 5V DC ANTENNAS

Dimensions	.3.05"D x 2.61" H (77.5mm x 66.2mm)
Weight	7.0oz (200grams)
Enclosure	Off-white plastic
Connector	F-type & TNC (5V) – TNC (3.3V only)
Mounting	$\dots 1'' - 14''$ thread or $\frac{34''}{4}$ pipe thread

TECHNICAL / PERFORMANCE SPECIFICATIONS

Feature	3.3V	5.0V	
Prime Power	3.3V DV (±10%)	5.0V DV (±10%)	
Power Consumption	<30mA	<35mA	
Gain	38dB ± 3dB (GPS)	40dB ± 3dB (GPS)	
Output Impedance	50Ω		
Frequency	GPS L1 1575.42 ±3MHz		
VSWR	2.0 maximum		
Axial ratio	<3dB		
Noise	2.0dB (typical)		
Bandwidth (10dB RL)	25 MHz (min)		
Out of Band rejection	fo= 1575.42MHz fo ±50 MHz: 30 dB typ fo ±100MHz: 40dB typ		
Azimuth coverage	360° (omni-directional)		
Elevation coverage	0°-90° elevation (hemispherical)	0°-90° elevation (hemispherical)	
ESD	IEC 61000-4-2		

MECHANICAL

NORTH AMERICA Trimble Navigation Limited Corporate Headquarters 935 Stewart Drive Sunnyvale, CA 94085 Phone: +1 703 237 7400 timing@trimble.com **EUROPE** Trimble Navigation Europe Phone: +4670-544-1020 KOREA Trimble Export Ltd. Korea Phone: +82-2-555-5361 CHINA Trimble Navigation Ltd. China Phone: +86-10-8857-7575



www.trimble.com

©2015, 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. Resolution SMT and The right one logo are trademarks of Trimble Navigation Limited. All other trademarks are the property of their respective owners.



CONNECTORS



GENERAL INFORMATION & ACCESSORIES

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