# Data Sheet

Transforming the Way the World Work

## Bullet<sup>™</sup> GB Antenna

### **KEY FEATURES**

- Multi-GNSS GPS and Beidou
- Weatherproof housing
- Extended temperature range (-40°C / +90°C)
- High gain 28 ±3dB
- Filtering for RF Jamming environments
- Available in 3.3V (TNC) or 5V (TNC or F)
- RoHS-II Compliant

### Multi-GNSS – GPS and Beidou

The Trimble<sup>®</sup> Bullet<sup>™</sup> GB timing antennas is designed to receive both GPS and Beidou signals. It is suitable for markets where Beidou will be the primary source of GNSS reference.

GNSS timing application will benefit from increased signal availability and multi-constellation redundancy. The increased number of visible satellites 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 GB antenna is an active GPS L1 and Beidou B1 bands antenna with 26dB gain. The Bullet GB 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 GB 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 GB antenna.



### Bullet<sup>™</sup> GB – GPS and Beidou Antenna

### **ENVIRONMENTAL SPECIFIATIONS**

re40°C to +90°C
40°C to +90°C
10 – 200 Hz Log sweep
3g (Sweep time 30 minutes) 3 axes
50g vertical, 30g all axes
+60°C @ 95% RH, 96 hours
nt5% Salt spray tested, 96 hours

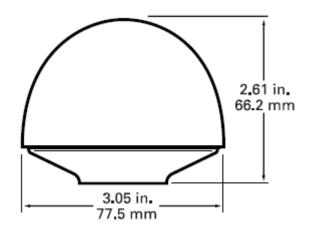
### PHYISCAL CHARCTERISTICS – 3.3V & 5V DC ANTENNAS

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	1" – 14" thread or ¾" pipe thread

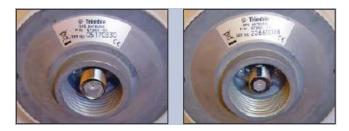
### **TECHNICAL / PERFORMANCE SPECIFICATIONS**

Feature	3.3V	5.0V
Prime Power	3.3V DV (±10%)	5.0V DV (±10%)
Power Consumption	<13mA	<20mA
Gain	26dB ± 3dB (GPS)	28dB ± 3dB (GPS)
Output Impedance	50Ω	
Frequency	GPS L1 1575.42 ±1.024MHz BDS B1 1561 ±2.046MHz	
VSWR	2.0 maximum	
Axial ratio	<5dB (GPS) <3dB	
Noise	2.0dB (typical)	
Bandwidth (10dB RL)	44 MHz (min)	
Out of Band rejection	fo= L1, B1 fo ±50 MHz: 30 dB typ fo ±100MHz: 40dB typ	
Azimuth coverage	GB° (omni-directional)	GB° (omni-directional)
Elevation coverage	0°-90° elevation (hemispherical)	0°-90° elevation (hemispherical)
ESD	IEC 61000-4-2	

### MECHANICAL



### CONNECTORS



### **GENERAL INFORMATION & ACCESSORIES**

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

NORTH AMERICA

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