Bullet™ III GPS Antenna

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, 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 III antenna is an active GPS L1 band antenna with 5V DC and 3.3V DC options. The high gain preamp allows the Bullet III antenna to be used with up to 75 feet of RG-59 cable.

**Proven Reliability**
For over 25 years, Trimble has sold GNSS antennas renowned for their survivability in tough environments. The Bullet III GPS antenna is the fourth 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 III GPS antenna.

**KEY FEATURES**
- Weatherproof housing
- Extended temperature range (-40°C / +90°C)
- Proven extra rugged, reliable
- Available in 3.3V (TNC) or 5V (TNC or F)
- RoHS-II Compliant
ENVIROMENTAL SPECIFICATIONS

Operating Temperature: -40°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 Resistant: 5% Salt spray tested, 96 hours

PHYSICAL 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

<table>
<thead>
<tr>
<th>Feature</th>
<th>3.3V</th>
<th>5.0V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime Power</td>
<td>3.3V DV ±10%</td>
<td>5.0V DV ±10%</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>&lt;20mA</td>
<td>&lt;30mA</td>
</tr>
<tr>
<td>Gain</td>
<td>28dB ± 3dB</td>
<td>30dB ± 3dB</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>50Ω</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>GPS L1 1575.42 ±1.023MHz</td>
<td></td>
</tr>
<tr>
<td>VSWR</td>
<td>2.0 maximum</td>
<td></td>
</tr>
<tr>
<td>Axial ratio</td>
<td>90°: 4 dB maximum; 10°: 6 dB maximum</td>
<td></td>
</tr>
<tr>
<td>Noise</td>
<td>3.0dB (typical)</td>
<td></td>
</tr>
<tr>
<td>Bandwidth (10dB RL)</td>
<td>50 MHz (min)</td>
<td></td>
</tr>
</tbody>
</table>
| Out of Band rejection    | fo= 1575.42MHz
|                          | fo ±20 MHz: 7 dB min
|                          | fo ±30 MHz: 12 dB min
|                          | fo ±50 MHz: 20 dB min
|                          | fo ±100MHz: 30dB min |
| Azimuth coverage         | 360° (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 www.trimble.com/timing for the latest documentation and tools, part numbers and ordering information.