



Bullet™ 40dB – High Gain GPS L1 Antenna

Datasheet v2.2

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 5V (TNC)
- RoHS-II Compliant

GPS L1 Band with higher gain

The Protempis 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 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 powered with 5V DC. The Bullet 40dB filtering improves immunity to other RF signals for reliable performance in hostile RF jamming environments.



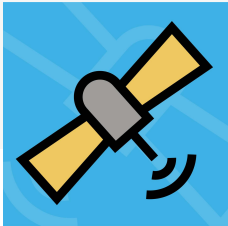
Proven Reliability

For over 25 years, Protempis 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 Protempis Bullet 40dB antenna.

Disclaimer

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ENVIRONMENTAL 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

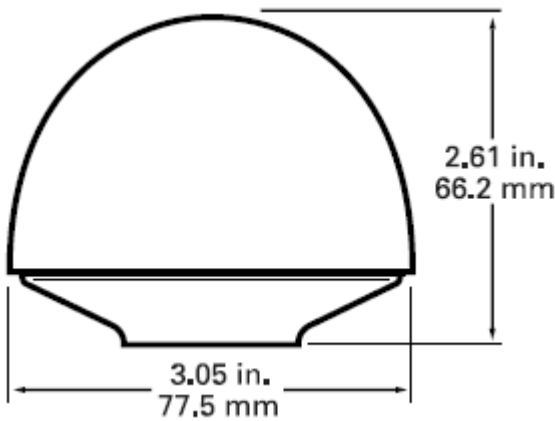
PHYISCAL CHARCTERISTICS – 5V DC ANTENNA

Dimensions.....3.05”D x 2.61” H (77.5mm x 66.2mm)
Weight.....7.0oz (200grams)
Enclosure.....Off-white plastic
Connector.....TNC (5V)
Mounting.....1” – 14” thread or ¾” pipe thread

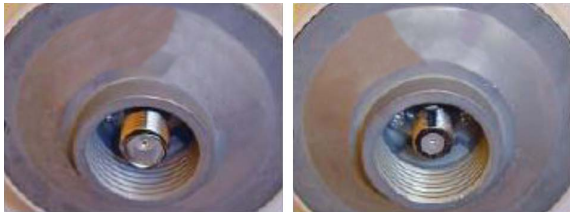
TECHNICAL / PERFORMANCE SPECIFICATIONS

Feature	5.0V
Prime Power	5.0V DV (±10%)
Power Consumption	<35mA
Gain	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)
ESD	IEC 61000-4-2

MECHANICAL



CONNECTORS



GENERAL INFORMATION & ACCESSORIES

Please go to www.protempis.com for the latest documentation and tools, part numbers and ordering information.