



## Bullet™ 360 Antenna

### KEY FEATURES

- Multi-GNSS – GPS, Galileo, Beidou & GLONASS constellations
- 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-III Compliant

### Multi-GNSS – GPS, GLONASS, Beidou & Galileo

The Trimble® Bullet™ 360 timing antennas are designed specifically for the congested urban environments.

GNSS timing application will benefit from increased signal availability and multi-constellation redundancy. In challenging urban environments 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 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.

### Strong Performance

The Bullet 360 antenna is an active GPS L1, Galileo E1, Beidou B1 and GLONASS G1 bands antenna with 28dB preamp (5V DC), 26dB preamp (3.3 VDC). The Bullet 360 filtering improves immunity 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 360 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 360 antenna.

# Bullet™ 360 – GPS, Galileo, Beidou & GLONASS Antenna

## 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

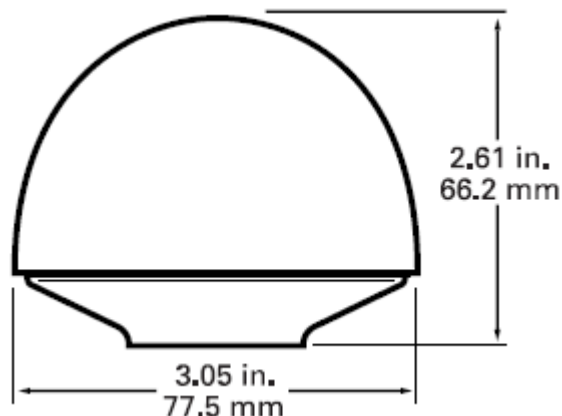
## PHYSICAL CHARACTERISTICS – 3.3V & 5V DC ANTENNAS

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 ±3MHz BDS B1 1561 ±3MHz GLO G1 1602 ±3MHz	
VSWR	2.0 maximum	
Axial ratio	<5dB (GPS) <3dB	
Noise	2.0dB (typical)	
Bandwidth (10dB RL)	70 MHz (min)	
Out of Band rejection	fo= L1, B1, G1 fo ±50 MHz: 30 dB typ fo ±100MHz: 40dB typ	
Azimuth coverage	360° (omni-directional)	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](http://www.trimble.com/timing) for the latest documentation and tools, part numbers and ordering information.

Trimble PN	Description
101155-00	Bullet 360 Antenna 5V, TNC
101155-10	Bullet 360 Antenna 5V, F
101155-20	Bullet 360 Antenna 3V, TNC

**NORTH AMERICA**  
 Trimble Inc.  
 Corporate Headquarters  
 935 Stewart Drive  
 Sunnyvale, CA 94085  
 Phone: +1 703 237 7400  
[timing@trimble.com](mailto: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

