DATASHEET

TRIMBLE AV33 GNSS ANTENNA

KEY FEATURES

Support for GPS L1, GLONASS L1, Galileo E1 and Compass B1

Low-profile Fuselage/Bulkhead Mounting

Sub-centimeter phase center repeatability

Small rugged package ideal for vehicle or man portable applications

HIGH PERFORMANCE GNSS SUPPORT

The Trimble AV33 GNSS Antenna has been designed to support high accuracy aerial, land and marine applications in one compact design. The rugged 4 hole bulkhead mounting allows the antenna to be used in the most rugged of environments.

COMPREHENSIVE GNSS SUPPORT

The Trimble AV33 GNSS antenna offers support for present and future L1 GNSS signals, including GPS, GLONASS,Galileo and Compass. This ensures that the antenna will operate with your present and most likely future GNSS receivers.

ROBUST, LOW-MULTIPATH GPS ANTENNA

The antenna resists unwanted signal interference or multipath, which can cause inaccurate measurements. Multipath is caused by signals being reflected from surfaces such as the ground, surrounding trees, or buildings.

FLEXIBILITY

The antenna is an aviation type of design. The bulkhead mounting ensures only the rugged radome is exposed to the elements. This is an ideal design for customers building machine control systems. The antenna can be mounted flush with the vehicle surface or on the top of a pole mount. The TNC connector is located on the underside of the unit ensuring the attached cable is also protected from the environment.

Trimble AV33 Antenna

Trimble

TRIMBLE AV33 GNSS ANTENNA

PERFORMANCE

- L1 Band GNSS Frequency tracking Including:
  - GPS: L1
  - GLONASS: L1
  - Galileo: E1
  - Compass: B1
  - SBAS: WAAS, EGNOS, QZSS, Gagan, MSAS
- Quality signal tracking
- TNCF female signal connector
- Small cross-sectional area to reduce wind loading
- Low voltage, low power consumption
- Integral low noise amplifier
- Powered by GNSS receiver via coaxial cable
- High gain for reliable tracking in difficult environments
- 4 recessed bulkhead mounting holes
- Rugged radome designed for machine environments

ELECTRICAL

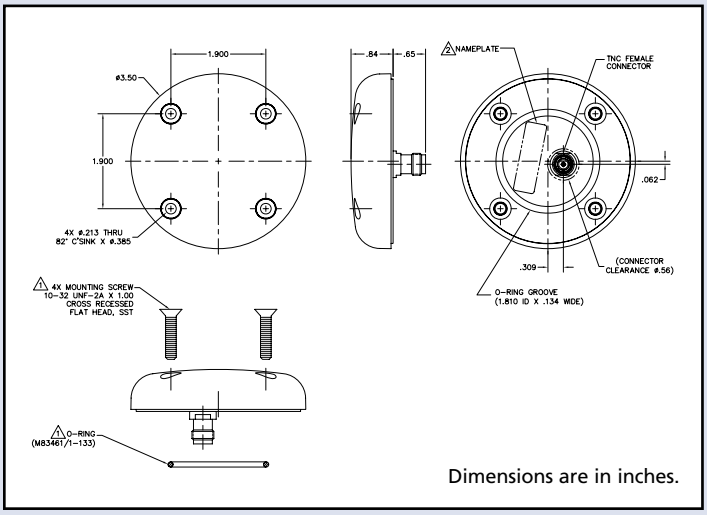
Frequencies . . . . . 1551–1615 MHz
Signal gain . . . . . 43 dB
Voltage . . . . . 4.5 V DC to 18 V DC
Polarization . . . . . Right Hand Circular
Axial Ratio . . . . . 3 dB Max @ boresight
Amplifier. . . . . Noise Figure : 2.5 dBMax
Impedance : 50 Ohms
VSWR : ≤ 2.0:1

HARDWARE

Dimensions . . . . . 8.9 cm diameter, 2.1 cm height (3.5" diameter, 0.84" height)
Weight . . . . . 0.200 Kg (0.44 lb)
Operating Temperature . . . . . –55 °C to +85 °C (–67 °F to +185 °F)
Altitude. . . . . ≤16,764 m (55,000 ft)
Finish. . . . . UV resistant, high impact thermoplastic white radome with aluminum base
Compliance. . . . . ROHS

ENVIRONMENTAL QUALIFICATIONS

CONDITIONS	DO-160D SECTION	STRING CATEGORY	DESCRIPTION
Temperature Variation	5	A	-55°C to +85°C, 10°/min, 2 cycles
Humidity	–	Method 507.4	MIL-STD-810-F
Shock	–	Method 516.5	MIL-STD-818-F Procedure II
Vibration	–	Method 514.5C-3	MIL-STD-810-F, Section 514.5-CVII



Dimensions are in inches.

Antenna shown with optional bracket. Bracket allows for mounting on single center 5/8 bolt or four perimeter bolts.

Specifications subject to change without notice.

Trimble

www.trimble.com/gnss-inertial

AMERICAS & ASIA-PACIFIC
TRIMBLE NAVIGATION LIMITED
Integrated Technologies
510 DeGuigne Drive
Sunnyvale, CA 94085
USA
+1-408-481-8070 Phone
+1-408-481-8984 Fax

EUROPE & MIDDLE EAST
TRIMBLE NAVIGATION LIMITED
Integrated Technologies
HAL Trade Center
Bevelandseweg 150
1703 AX Heerhugowaard
Netherlands
+31-725-724-408 Phone
+31-725-348-288 Fax

CHINA
TRIMBLE NAVIGATION LIMITED
Integrated Technologies
311 Fute (M) Road, 3/F
Wai Gaoqiao Free Trade Zone
Pudong, Shanghai 200131
China
Email: chinasales@pacificcrest.com

RUSSIA
TRIMBLE NAVIGATION LIMITED
Integrated Technologies
Tel: +7 495 5041081
Email: rusales@pacificcrest.com