

KEY FEATURES

Comprehensive GNSS support, including GPS Modernization signals, GLONASS, BeiDou and Galileo

Rugged Package ideal for vehicle applications

Bulkhead Mounting

Sub-centimeter phase center repeatability



TRIMBLE AV59 GNSS ANTENNA

HIGH PERFORMANCE GNSS SUPPORT

The Trimble AV59 GNSS Antenna has been designed to support centimeter level accuracy on aerial, land and marine applications. The rugged 8 hole bulkhead mounting allows the antenna to be used in the most rugged of environments.

COMPREHENSIVE GNSS SUPPORT

The Trimble AV59 GNSS antenna offers support for present and future GNSS signals, including GPS L5, GLONASS, BeiDou and Galileo. 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 AV59 GNSS ANTENNA

PERFORMANCE

- Broad GNSS Frequency Tracking Band Including:
 - GPS: L1, L2, L5
 - GLONASS: L1, L2, L3
 - Galileo: E1, E2, E5
 - BeiDou B1, B2
 - SBAS: WAAS, EGNOS, QZSS, Gagan, MSAS, and OmniStar
- Quality signal tracking
- TNC female signal connector
- Small cross-sectional area to reduce wind loading
- Low voltage, low power consumption
- Integral low noise amplifier
- 8 recessed bulkhead mounting holes
- Powered by GNSS receiver via coaxial cable
- Rugged radome designed for machine environments
- High gain for reliable tracking in difficult environments

ELECTRICAL

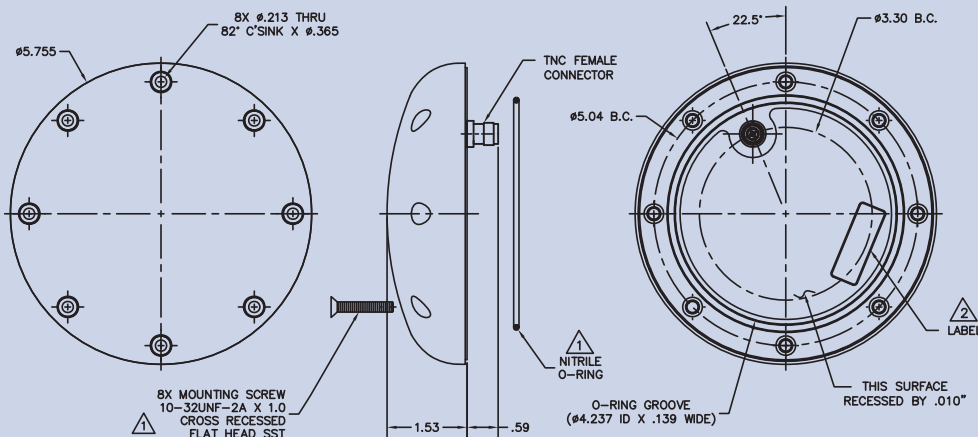
Signal gain 39 dB
Voltage 4.2 V DC to 15 V DC
Polarization Right Hand Circular
Axial Ratio 3 dB Max @ boresight
Amplifier Noise Figure : 2.6 dBMax
Impedance : 50 Ohms
VSWR : $\leq 2.0:1$

HARDWARE

Dimensions 14.62 cm diameter x 3.89 cm height
(5.575 in diameter x 1.53 in height)
Weight 0.30 Kg (0.67 lb)
Operating Temperature -40 °C to +85 °C (-40 °F to +185 °F)
Altitude $\leq 16,764$ m (55,000 ft)
Finish UV resistant 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



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