DATASHEET

KEY FEATURES

Support for GPS L1, GLONASS L1, GPS L2, and GLONASS L2

Low-profile Fuselage/Bulkhead Mounting

Sub-centimeter phase center repeatability

Small rugged package ideal for vehicle or man portable applications

HIGH PERFORMANCE DUAL FREQUENCY GNSS SUPPORT

The Trimble AV34 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.

GNSS SUPPORT

The Trimble AV34 GNSS antenna offers support for both GPS and GLONASS L1/L2 signals. These are the optimum set of signals for your high accuracy RTK receiver. Dual frequency allows for faster initialization and dual constellation improves the number of satellites available for positioning, especially in obstructed environments.

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 AV34 Antenna





TRIMBLE AV34 GNSS ANTENNA

PERFORMANCE

- L1 Band GNSS Frequency tracking Including:
- GPS: L1
- GLONASS: L1
- SBAS: WAAS, EGNOS, QZSS, Gagan, MSAS
- L2 Band GNSS Frequency tracking Including:
 - GPS: L2
 - GLONASS: L2
- 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	1565–160/ MHz
	1217–1260 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

At 4213 TIRUL (CONNECTOR CLEMANCE 6.56)

At 4213 TIRUL (CONNECTOR CLEMANCE 6.56)

O-RNO GROOVE (1.810 D X 1.354 MDE)

Dimensions are in inches.

HARDWARE

Dimensions	8.9 cm diameter, 2.1 cm height
	(3.5" diameter, 0.84" height)
Weight	0.213 Kg (0.47 lb)
Operating Temperature	55 °C to +85 °C (-67 °F to +185 °F)
Altitude	≤16,764 m (55,000 ft)
FinishUV resistant, high	impact thermoplastic white radome
	with aluminum base
Compliance	ROHS

ENVIRONMENTAL QUALIFICATIONS

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CONDITIONS	DO-160D SECTION	STRING CATEGORY	DESCRIPTION		
Temperature Variation	5	А	-55°C to +85°C, 10°/min, 2 cycles		
Humidity	-	Method 507.4	MIL-STD-810-F		
Shock	1	Method 516.5	MIL-STD-818-F Procedure II		
Vibration	_	Method 514.5C-3	MIL-STD-810-F, Section 514.5-CVII		



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.

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