



# Trimble AV34 Antenna

HIGH ACCURACY AERIAL, LAND AND MARINE APPLICATIONS

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.

## COMPREHENSIVE 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.

## 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



# Trimble AV34 GNSS Antenna

## TECHNICAL SPECIFICATIONS

- Comprehensive GNSS Tracking:
  - GPS: L1, L2
  - GLONASS: L1, L2
  - Galileo: E1
  - BeiDou: B1
  - SBAS: WAAS, EGNOS, QZSS, GAGAN, and MSAS
- Quality signal tracking
- TNC 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

## 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	-	514.5C.3	MIL-STD-810-F, Section 514.5 CVII

## PHYSICAL AND ELECTRICAL SPECIFICATIONS

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)

Finish ..... UV resistant, high impact thermoplastic white or  
black, aluminum base

Compliance ..... ROHS

Frequencies ..... 1565-1607 MHz  
1217-1260 MHz

Signal gain ..... 43 dB

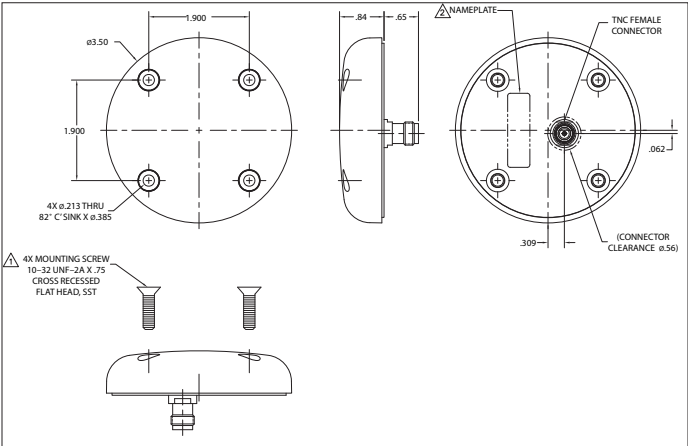
Voltage..... 4.5 V DC to 18 V DC

Polarization ..... Right Hand Circular

Axial Ratio..... 3 dB Max @ boresight

Amplifier Noise Figure..... 2.5 dB Max

Impedance ..... 50 Ohms  
VSWR: ≤ 2.0:1



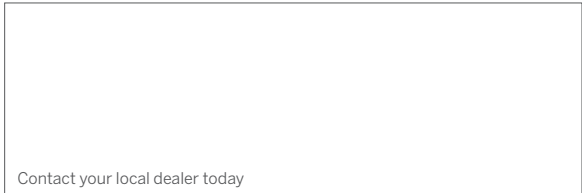
## PART NUMBER

86362 ..... Trimble AV34 Antenna (White)  
86362-10 ..... Trimble AV34 Antenna (Black)



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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