

### KEY FEATURES

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

Rugged Package ideal for vehicle applications

5/8" x 11 Mounting

Sub-centimeter phase center repeatability



TRIMBLE LV59 GNSS ANTENNA

### HIGH PERFORMANCE GNSS SUPPORT

The Trimble LV59 GNSS Antenna has been designed to support centimeter level accuracy on land and marine applications. The rugged 5/8" x 11 female threaded mount and all aluminum base allows the antenna to be used in the most rugged of environments.

### COMPREHENSIVE GNSS SUPPORT

The Trimble LV59 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 a survey rover type of design. This allows the use of standard survey accessories for either pole or vehicle mounting. Alternatively create your own 5/8" x 11 bolt mounting. This is an ideal design for customers building systems that require easy removal of the antenna. The TNC connector is located on the underside of the unit ensuring the attached cable is also protected from the environment.

# TRIMBLE LV59 GNSS ANTENNA

## PERFORMANCE

- Broad GNSS Frequency Tracking Band Including:
  - GPS: L1, L2, L5
  - GLONASS: L1, L2, L3
  - BeiDou: B1, B2
  - Galileo: E1, E2, E5,
  - 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
- 5/8" x 11 UNC female threaded aluminum mounting point
- Powered by GNSS receiver via coaxial cable
- Rugged UV resistant radome and aluminum base designed for machine environments
- High gain for reliable tracking in difficult environments

## ELECTRICAL

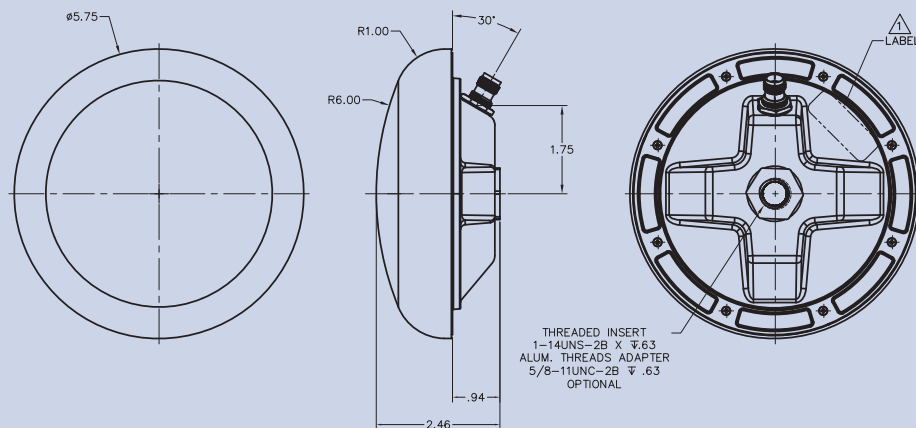
Signal gain ..... 39 dB  
 Voltage ..... 4.2 V DC to 15 V DC  
 Polarization ..... Right Hand Circular  
 Axial Ratio ..... 3 dB Max @ boresight  
 Amplifier ..... Noise Figure : 2.6 dBMax  
 Impedance : 50 Ohms  
 VSWR :  $\leq 2.0:1$

## HARDWARE

Dimensions ..... 14.62 cm diameter x 3.89 cm height  
 (5.575 in diameter x 1.53 in height)  
 Weight ..... 0.48 Kg (1.06 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



Specifications subject to change without notice.

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AMERICAS  
 TRIMBLE NAVIGATION LIMITED  
 Integrated Technologies  
 510 DeGuigne Drive  
 Sunnyvale, CA 94085 USA  
 +1-408-481-8000 Phone  
 Email: americasales-intech@trimble.com

EUROPE & MIDDLE EAST  
 TRIMBLE NAVIGATION LIMITED  
 Integrated Technologies  
 Germany  
 +49 (6142) 2100-348 Phone  
 France  
 +33 2 28 09 3800 Phone  
 Email: emeasales-intech@trimble.com

CHINA  
 TRIMBLE NAVIGATION LIMITED  
 Integrated Technologies  
 Email: chinasales-intech@trimble.com

ASIA - PACIFIC  
 TRIMBLE NAVIGATION LIMITED  
 Integrated Technologies  
 Email: asiasales-intech@trimble.com

RUSSIA  
 TRIMBLE NAVIGATION LIMITED  
 Integrated Technologies  
 +49 (6142) 2100-348 Phone  
 Email: rusasales-intech@trimble.com