DATASHEET

KEY FEATURES

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

Rugged Package ideal for vehicle applications

5/8" x 11 Mounting

Sub-centimeter phase center repeatability

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 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
 - 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 11UNC 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

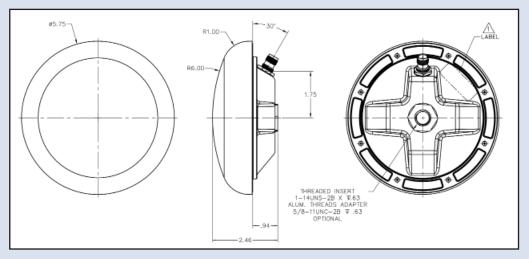
VSWR : ≤ 2.0:1

HARDWARE

Dimensions	14.62 cm diameter x 6.25 cm height
	(5.75 in diameter x 2.46 in height)
Weight	0.48 kg (1.06lb)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Finish	UV resistant white radome with
	aluminum base
Compliance	ROHS

ENVIRONMENTAL QUALIFICATIONS

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	-	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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