

Trimble AV29 Antenna

Lightweight, helix-based quad-frequency antenna

The Trimble® AV29 antenna is a helix based quad-frequency GNSS L-band antenna. This antenna is ideal for a variety of industrial applications due to its lightweight, small form factor and low power consumption design.

Comprehensive GNSS support

The Trimble AV29 offers support for GPS L1/L2/L5, GLONASS L1/L2/L5, Galileo E1/E5a/E5b/E6 and BeiDou B1/B2/B2a/B3i as well as Trimble RTX® correction services via L-band.

Designed for field robotic applications

Trimble AV29 features a helix design with exceptional pattern control, polarization purity and high efficiency in a very compact form factor. Low axial ratio ensures that the antenna captures right-hand circular polarization (RHCP) signal well and mitigates the reflected LHCP signals. Antenna ensures high signal-to-noise ratio (SNR) and GNSS signal tracking from all elevation angles in all types of environments. The antenna is ground plane independent which simplifies installation on many platforms.



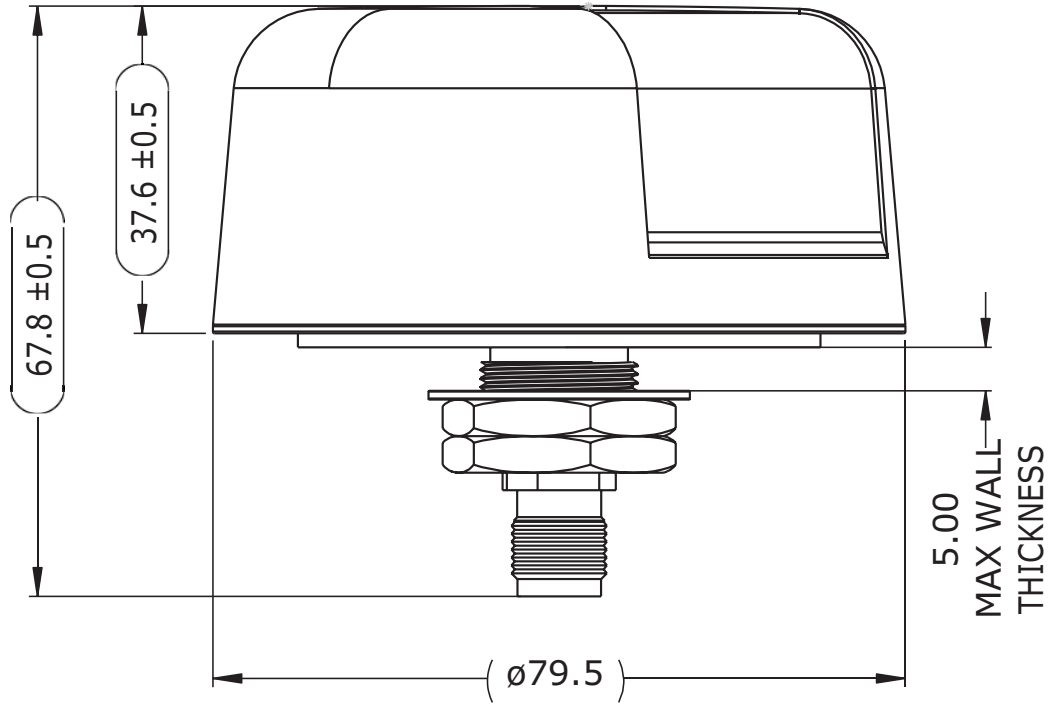
Key features

- Lightweight at 114 g
- Small footprint
- Supports L1, L2, L5 and E6 bands
- Excellent signal to noise ratio
- IP67, REACH and RoHS compliant

Additional key features of the AV29 include:

- Low axial ratio
- LNA Gain: 40 dB typ
- Low current: 40 mA (max.)
- EMI Immunity out of band: 30 kV
- Invariant performance from: +2.3 to 16 VDC

Trimble AV29 Antenna



Electrical specifications

Frequency Bandwidth	1539 MHz - 1610 MHz 1164 MHz - 1300 MHz
Overall LNA Gain	40 dB typ
LNA Noise Figure	3.1 dB @ upper band 2.9 dB @ lower band
Supply Voltage Range	+2.3 to 16 VDC
Supply Current	40 mA (max.)
EMI Immunity Out of Band	30 KV
Peak gain	3.4 dBic @ upper band 3.3 dBic @ lower band
Polarization	RHCP
Out of band rejection	≥ 70 dB @ ≥ 1700 MHz ≥ 35 dB @ ≥ 1650 MHz ≥ 35 dB @ 1450 - 1520 MHz ≥ 60 dB @ 1350 - 1450 MHz ≥ 80 dB @ ≤ 1125 MHz

Physical & environmental specifications

Size	79.5 mm (D) x 37.6 mm (H)
Weight	114 g
Connector	TNC
Operating Temperature Range	-40 °C to +85 °C
Enclosure	Radome ABS/PC
Environmental	IP67, RoHS and REACH compliant
Mounting	Connector through hole mount

Part number

136029.....Trimble AV29 Quad Frequency L1/L2/L5/E6, L Band (MSS) Antenna

Specifications subject to change without notice.

Contact your local Trimble Authorized Distribution Partner for more information

North America
Trimble Inc.
10368 Westmoor Drive
Westminster CO 80021
USA
+1-720 887-6100

Email: sales.oemgnss@trimble.com