# **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

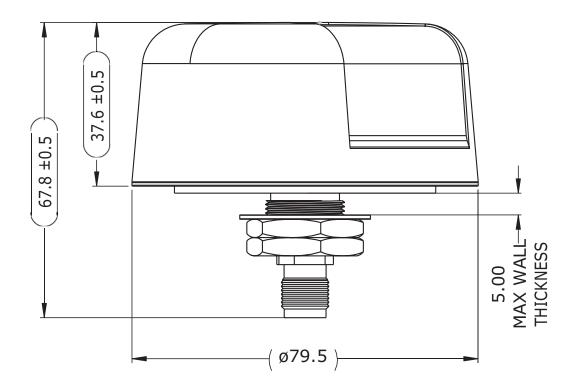
# Additional key features of the AV29 include:

- · 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         |                           |
|                          | 2.9 dB @ lower band       |
| Supply Voltage Range     | +2.3 to 16 VDC            |
| Supply Current           |                           |
| EMI Immunity Out of Band | 30 KV                     |
| Peak gain                |                           |
|                          | 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    |
| MountingCom                 | nnector through hole mount  |

#### Part number

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

Specifications subject to change without notice.



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