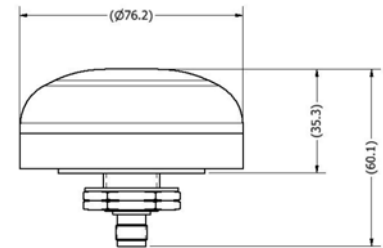


### Multi-GNSS High Performance Antenna



**GNSS Systems:** 1150 - 1290 MHz (GPS L2/L5; GALILEO E5A/E5B/E6; QZSS L6; GLONASS L2/L3; BEIDOU B2/B3)  
 1500 - 1615 MHz (GPS L1; GALILEO E1; GLONASS L1; BEIDOU B1/B1-2)

The GNSS-L125-TNC is a multi-GNSS high performance antenna designed to meet stringent AAR environmental standards. The antenna features a multi-stacked patch design covering global GNSS frequencies, a multi-stage LNA and advanced filtering to combat the effects of adjacent band interference. The antenna has a hermetic seal, is AAR tested and approved.



GNSS-L125-TNC

#### Features

- Full Multi-GNSS Compatibility
- Advanced Out-of-Band Filtering
- AAR Compliant
- Excellent Multipath Mitigation
- IP67 ingress protection

#### Applications

- PTC Rolling Stock Tracking
- Military Vehicle Tracking & Asset Tracking
- Precision Agriculture
- Differential Correction

#### ELECTRICAL SPECIFICATIONS - ALL BANDS

| LNA Gain        | Nominal Impedance | Polarization        | ESD Protection | VSWR          | Noise Figure  | DC Voltage   | DC Current                    | Out-of-Band Rejection                                    |   |
|-----------------|-------------------|---------------------|----------------|---------------|---------------|--------------|-------------------------------|--|---|
| 28dB<br>+/- 3dB | 50 ohms           | Right Hand Circular | >15kV          | <2.0:1 (typ.) | 3.0 dB (typ.) | 2.5-12.0 VDC | 37 mA (typ.)<br><50 mA (max.) | <1050 MHz >80 dB<br><1125 MHz >30 dB<br>>1350 MHz >70 dB | <1450 MHz >70dB<br>>1690 MHz >30dB<br>>1730 MHz >80dB |

#### ELECTRICAL SPECIFICATIONS - BAND SPECIFIC

| Band        | Gain @ 10° Elevation | Gain @ 90° Elevation | Axial Ratio @ 30° Elevation | Axial Ratio @ 45° Elevation | Axial Ratio @ 90° Elevation |
|-------------|----------------------|----------------------|-----------------------------|-----------------------------|-----------------------------|
| GPS L1      | -5 dBic              | 2 dBic               | ≤ 2.5 dB                    | ≤ 2.5 dB                    | ≤ 2.5 dB                    |
| GPS L2      | -6 dBic              | 3 dBic               |                             |                             |                             |
| GPS L5      | -7 dBic              | 1 dBic               |                             |                             |                             |
| GLONASS L1  | -7 dBic              | 0 dBic               |                             |                             |                             |
| GLONASS L2  | -8 dBic              | 0 dBic               |                             |                             |                             |
| GLONASS L3  | -4 dBic              | 3 dBic               |                             |                             |                             |
| GALILEO E1  | -5 dBic              | 2 dBic               |                             |                             |                             |
| GALILEO E5  | -4 dBic              | 3 dBic               |                             |                             |                             |
| GALILEO E6  | -4 dBic              | 3 dBic               |                             |                             |                             |
| BEIDOU B1   | -4 dBic              | 3 dBic               |                             |                             |                             |
| BEIDOU B1-2 | -4 dBic              | 3 dBic               |                             |                             |                             |
| BEIDOU B2   | -5 dBic              | 2 dBic               |                             |                             |                             |
| BEIDOU B3   | -8 dBic              | 0 dBic               |                             |                             |                             |
| QZSS L6     | -4 dBic              | 3 dBic               |                             |                             |                             |

#### MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

| Antenna Dimensions                  | Antenna Weight | Connector  | Mounting Method           | Radome Color | IP Rating | Radome Seal   | Environmental Rating |
|-------------------------------------|----------------|------------|---------------------------|--------------|-----------|---------------|----------------------|
| 3.0" D x 1.4" H<br>(76.2 x 35.3 mm) | 7.4 ounces     | TNC Female | 3/4" thru-hole or bracket | White        | IP67      | Rubber Gasket | AAR Compliant        |