

Multi-GNSS Precision Antenna

GNSS/GPS Antenna – Precision

GNSS-L125-TNC



Description

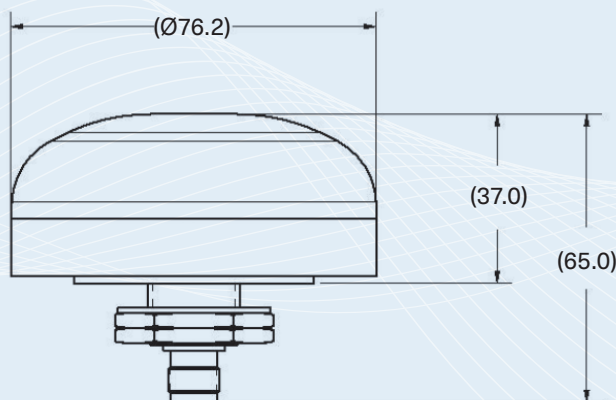
Designed to meet stringent AAR environmental standards, this multi-GNSS high performance antenna features a multi-stacked patch design covering global GNSS frequencies, a multi-stage LNA, and advanced filtering to combat the effects of adjacent band interference.

Technologies

- GPS L1/L2/L5
- GLONASS L1/L2/L3
- Galileo E1/E5/E6
- Beidou B1/B2
- QZSS L6

Features

- Full multi-GNSS compatibility
- Advanced out-of-band filtering
- AAR compliant
- Excellent multipath mitigation
- IP67 ingress protection



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GNSS/GPS Antenna – Timing

The PCTEL® 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 and is AAR tested and approved.

Features

- High performance that meets strict AAR standards
- Versatile – Full multi-GNSS compatibility
- Excellent multipath mitigation – With multi-stacked patch design
- Combats adjacent band interference – Via advanced out-of-band filtering
- Withstands severe environmental conditions – IP67 compliant design protects against water or dust ingress
- AAR Compliant

Applications

- PTC rolling stock tracking
- Military vehicle tracking and asset tracking
- Precision agriculture
- Differential correction

Certifications



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Electrical Specifications – All bands

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

Mechanical and Environmental Specifications

Specification	Measurement
Dimensions (D x H)	3.0" D x 1.4" H (76.2 D x 37.0 H mm)
Weight	7.4 ounces
Connector	TNC Female
Mount ¹	¾" thru-hole or bracket mount
Radome Color	White
IP Rating	IP67
Radome Seal	Rubber gasket
Environmental Rating	AAR compliant

CONTACT US

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this product contact your
sales representative or visit
> pctel.com/antenna-products**

Solving Complex Wireless Challenges

PCTEL, an Amphenol company, is a leading global provider of wireless technology solutions, including purpose-built Industrial IoT devices, antenna systems, and test and measurement products. Trusted by our customers for decades, we solve complex wireless challenges to help organizations stay connected, transform, and grow.



PCTEL, Inc.

T: +1 630 372 6800 | pctel.com

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