

ELX1115-SMA ANTENNA

ELX1115-SMA Active Helix Antenna

The ELX1115-SMA is a compact active dielectrically loaded helical antenna for L1 and L5 bands. It has an intrinsic band-pass filter response, tightly tuned to L1 and L5 frequency bands which provides protection from out of band interference.

This antenna is robust and durable with high multi-frequency gain for its size and footprint

The ELX1115-SMA supports multi-constellations including GPS L1/L5, BeiDou B1/B2a, Galileo E1/E5a, GLONASS G1 and SBAS.



Applications

- ▶ Drones / UAVs
- ▶ Asset Tracking
- ▶ Portable GNSS terminals
- ▶ Precision Navigation
- ▶ Industrial / Agricultural applications

Key Features

- ▶ High gain across both bands
- ▶ Highly accurate, focused phase centre
- ▶ RHCP with excellent co-to-cross polarisation ratio
- ▶ Immunity to detuning in near field
- ▶ SMA connector mount / Flat base with O-Ring

SPECIFICATIONS

Frequency Range	Axial Ratio	VSWR	Multipath Reduction Ratio (MRP)	Impedance	Bandwidth (3db) L1 / L2
L1 - 1559 - 1591 MHz L5 - 1,164 - 1,191.75 MHz	3 dB	<2:1	10 dB	50 Ohm	L1 - 30 MHz L5 - 27 MHz
			1w	50 Ohm	Linear
Noise Figure	Input Power	Power Consumption	Polarisation: co-to-cross disc @zenith	L1 Peak Gain @ zenith	L5 Peak Gain @ zenith
1.5 dB	1.8 - 5.0V	9 mA	15 dB	33 dBic	30 dBic
Out of band rejection (100 MHz offset from carrier)	Radome Material	Dimensions	Connector	IP Rating	Operating Temperature
40 dB	Thermolast	53x19 (hxd)	SMA-Male	IP67	-45 to +85 C