



Alpha 19

Small Footprint GPS Antenna



Key Features

- Small footprint
- Water resistant
- Wide operating temperature

General Description

The Alpha 19 is a small footprint active GPS antenna, ideal for small spaces. It has an adhesive base for simple installation. A water resistant design with a wide operating temperature range of -40 to +85°C.

The Alpha 19 comes as standard with a GPS 1574.5MHz band but can be supplied as a GPS/GLONASS antenna.

Alternative cable lengths and connector types may be specified for volume orders.

Additional Considerations

- 26 x 23 x 12mm
- Simple and quick installation
- Meets all EU compliance criteria for electronic goods





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Dielectric Antenna

Impedance:	50 Ohm
Peak Gain:	>1dBic Based on 7x7cm ground plane
Gain Coverage:	>-4dBic @ -90°
VSWR:	1.5:1
Center Frequency:	1575.42MHz $\pm$ 3MHz
Bandwidth:	$\pm$ 5MHz
Polarization:	RHCP

LNA/Filter - Specifications

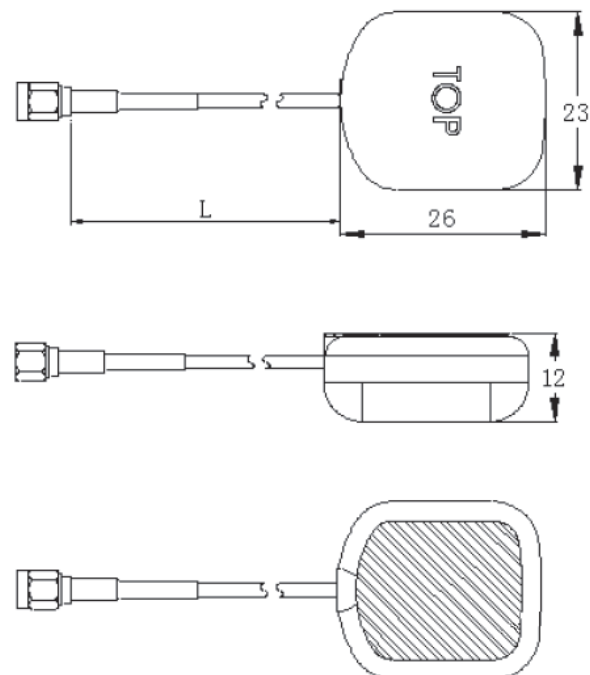
LNA Gain:	26dB Typical
Noise Figure:	1.5dB
VSWR:	<2.0
Filter out band attenuation: (f0=1575.42MHz)	7dB min - f0 $\pm$ -20MHz 20dB min - f0 $\pm$ -50MHz 3dB min - f0 $\pm$ -100MHz
DC Voltage:	3 - 5V
DC Current:	11mA max

Mechanical Specifications

Dimensions:	26 x 23 x 12mm
Weight:	<100g
Cable:	RG174
Connector:	SMA Male
Mounting Method:	Adhesive

Environmental Specifications

Operating Temperature:	-40 - +85°C
Storage Temperature:	-45 - +100°C

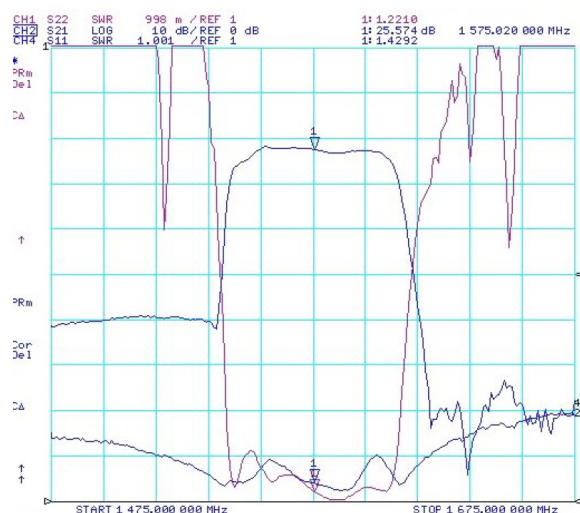




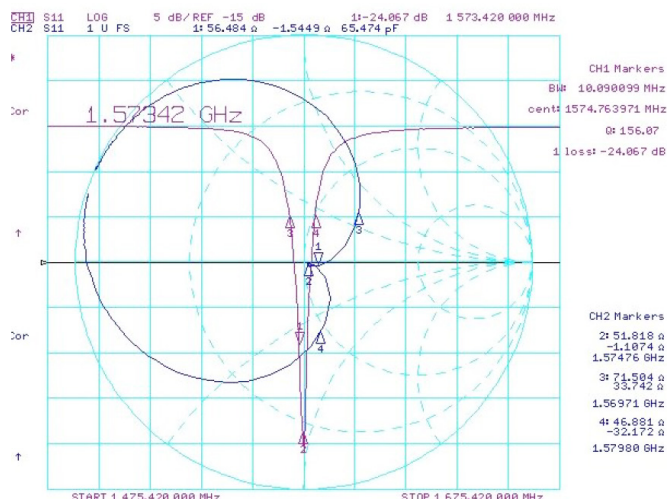
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LNA test curve



Patch test curve



Ordering Details

Part Number Description

ALPHA19/1M/SMAM/S/S/17 26dBi GPS Antenna, 1m Cable, SMA Male Connector

ALPHA19/3M/SMAM/S/S/17 26dBi GPS Antenna, 3m Cable, SMA Male Connector

ALPHA19/5M/SMAM/S/S/17 26dBi GPS Antenna, 5m Cable, SMA Male Connector