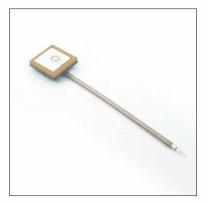


General Description

The Siretta Echo 13 GPS antenna is a low profile patch antenna with an integrated 16dB, Low Noise Amplifier.

A small size and efficient performance is achieved from just 16dB gain by the use of a single stage LNA with just a +/- 1.0MHz tolerance. This allows quicker satellite acquisition and reacquisition from just 13mA at 3V. The 16dB gain helps prevent over saturation of a GPS receiver RF front end, common with many of todays GPS receiver engines. The 5.1mm thick design incorporates the latest 2mm ceramic patches available.

The Echo 13 can be easily embedded by OEM's and Systems Integrators via its adhesive pad fitted under the LNA shield whilst a wide range of cable lengths can be supplied with various connector configurations.



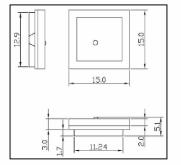
| <u>Features</u> | Benefits | |
|------------------------|--|--|
| 16dB Single Stage LNA | Allows integration with todays high sensitivity GPS receiver engines | |
| Small Size | 15 x 15 x 5.1mm LxWxH – ideal for low profile applications | |
| Highly Sensitive | +/-1mm tolerance enables faster TTFF and re-acquisition times | |
| Fixed Via Adhesive Pad | Easily mounts inside enclosure – no fixing screws needed | |
| RoHS compliant | Meets all EU compliance criteria for electronic goods | |

Key Specifications - Mechanical

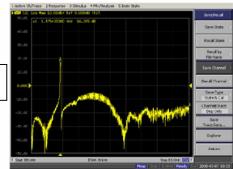
Dimensions: 15x15x5.1mm (LxWxH) Cable: Please refer to table below Connector: Please refer to table below Mounting method: Adhesive pad under LNA Weight: 3.4g (excluding cable)

Key Specifications - Electrical

| Temperature Range: | -40°C to 85°C | |
|------------------------|--------------------------|--|
| Operating Frequencies: | 1575.42MHz +/- 1.023 MHz | |
| Radiating element: | ceramic patch | |
| Polarisation: | RHCP | |
| Impedance: | 50 Ohms | |
| VSWR: | 2.0 max | |
| Voltage: | 2.5 – 3.5V | |
| Current: | 13mA @ 3V | |



16dB gain measured at 1575.42MHz



S21 Gain (network analyzer input power is -40dB

+/- 1.0MHz tolerance at 1575.42MHz



| Specification/Description | Part Number |
|--|-------------------|
| 16dB GPS embedded patch antenna 60mm cable stripped and tinned end | ANTB0006H1628AP11 |
| 16dB GPS embedded patch antenna 60mm cable UFL | ANTB0006G1528AP11 |
| 16dB GPS embedded patch antenna 60mm cable MMCX rectangle plug | ANTB0006K1628AP11 |

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