



## Echo 27 v2.0

15 x 15mm GPS Internal Active Antenna



### Key Features

- Active GPS
- LNA gain of 27dB
- Centre frequency of 1575.42MHz

### General Description

The Echo 27 is a GPS embedded ceramic patch antenna that combines excellent performance characteristics at a low operating voltage.

This updated V2 version provides a huge 5dBi LNA amplifier gain over the predecessor.

With a built in LNA giving 27dB gain from just 6.6mA current consumption and operating between 2.3 and 5.5V DC this combination is ideally suited to low power applications.

Supplied as standard with 100mm coax cable and terminated with a uFL/IPEX connector. Alternative cable lengths and connector types can be fitted for volume requirements.

### Additional Considerations

- Ceramic filter to reduce noise
- Small footprint allows integration into tight spaces
- Meets all EU compliance criteria for electronic goods





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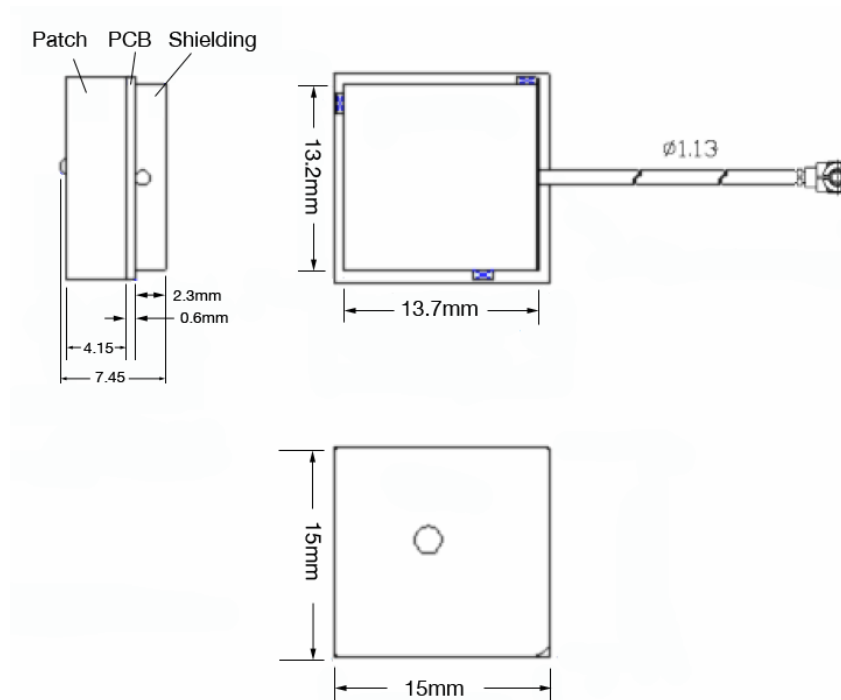
15 x 15mm GPS Internal Active Antenna

### Electrical Specification

|  |                           |
|--|---------------------------|
| Operating temperature:                   | -40 to +90°C              |
| Relative humidity:                       | 10 -95%                   |
| Impedance:                               | 50 ohm                    |
| LNA Gain:                                | 27dB typ                  |
| LNA VSWR:                                | 2.0 (max)                 |
| Supply voltage:                          | 2.3V - 5.5V DC            |
| Current consumption:                     | 6.6 - 16mA                |
| Centre frequency:                        | 1575.42MHz $\pm$ 1.023MHz |
| Bandwidth:                               | CF $\pm$ 5MHz             |
| Polarization:                            | RHCP                      |
| Dielectric Antenna Gain at Zenith        | 1 dBi typ                 |
| Dielectric Antenna Gain at 10° Elevation | -7 dBic max               |
| Dielectric Antenna VSWR                  | <2.0:1                    |

### Mechanical Specification

|             |                  |
|-------------|------------------|
| Dimensions: | 15 x 15 x 7.45mm |
| Cable:      | 1.13mm           |
| Connector:  | IPEX             |
| Mounting:   | Internal         |



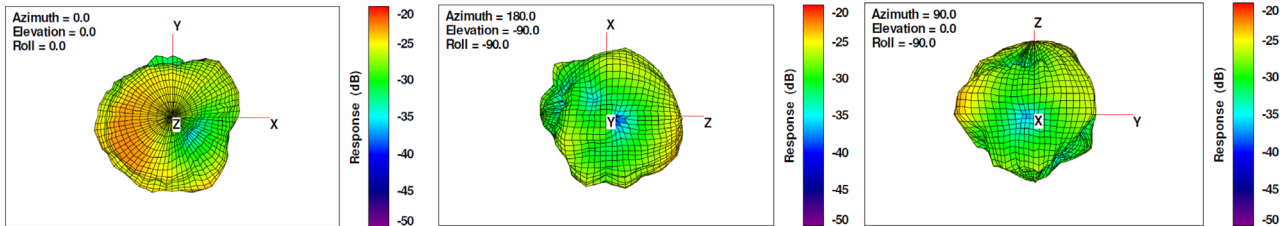


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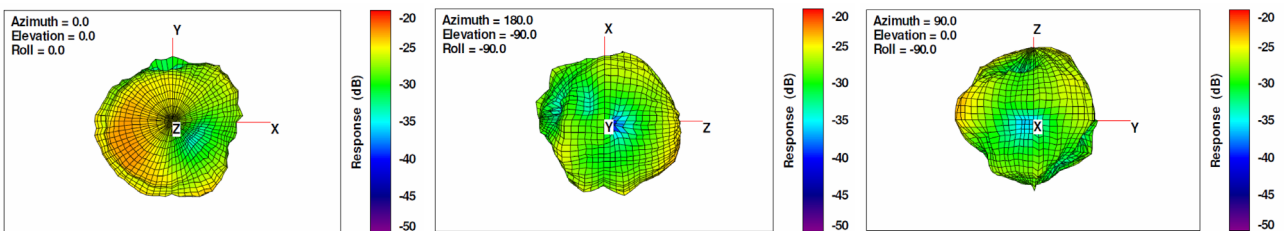
15 x 15mm GPS Internal Active Antenna

### Radiation Patterns

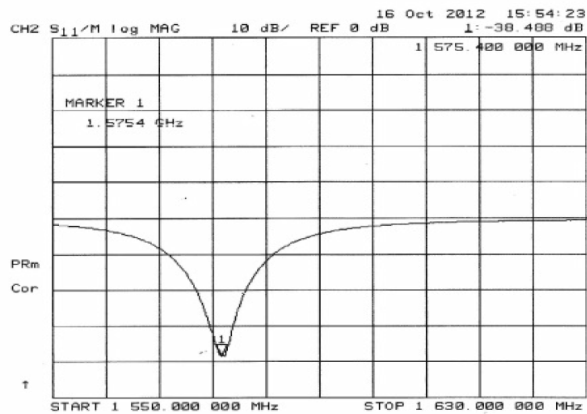
1575MHz



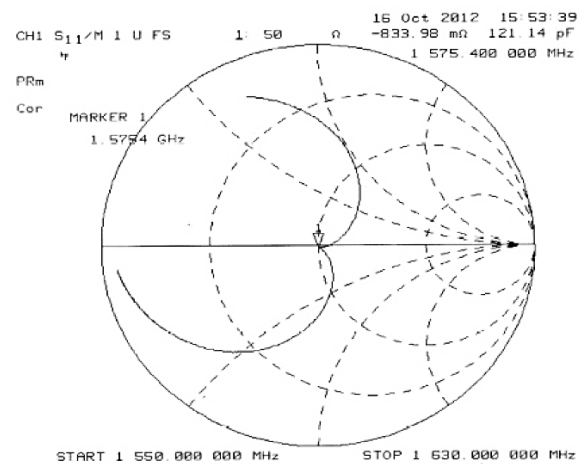
1575.42MHz



### Return Loss



### Impedance



### Ordering Details:

| Part number             | Description  |
|-------------------------|--|
| ECHO27/0.1M/IPEX/S/S/15 | GPS Internal Active Antenna, 100mm Cable, IPEX Connector |