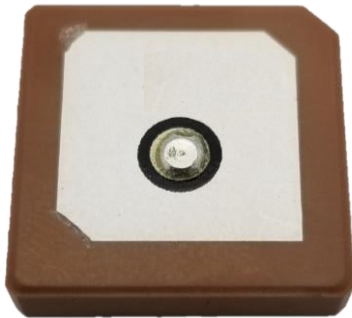


# Part No. 1004322

## GPS/GLONASS/Beidou/Galileo Patch Antenna

1.561, 1.575, 1.603 GHz

Supports: Tracking, Smart Home, Agriculture, Automotive, Healthcare, Digital Signage, Wearables, Industrial Devices



### GPS / GLONASS / Beidou / Galileo Patch Antenna

1.559 – 1.610 GHz

Ethertronics' antennas deliver on the key needs of device designers for higher functionality and performance in smaller/thinner designs. These innovative antennas provide compelling advantages for a GNSS enabled handheld devices, media players and other mobile devices.

#### Electrical Specifications

Typical characteristics measured on a 70 x 70 mm PCB ground plane.

Frequency (GHz)	1.559 – 1.563	1.575	1.559 – 1.591	1.593 – 1.610
GNSS Bands	Beidou	GPS	Galileo	Glomass
Peak Gain (dBi)	3.89	3.12	4.06	3.92
Center Frequency $f_0$ (GHz)	1.561	1.575	1.575	1.603
Average Efficiency	54%	58%	51%	59%
Average VSWR	1:3.5	1:2.8	1:3.8	1:2.2
Feed Point Impedance	50 $\Omega$ unbalanced			

#### KEY BENEFITS

##### Reduced Costs & Time-to-Market

Standard antennas eliminate design fees, redesign cycle time and minimize risk associated with customer solution. Quicker time to market.

##### Quicker Time-to-Market

By optimizing antenna size, performance and emissions, customer and regulatory specifications are more easily met.

##### Reliability

Products are the latest RoHS version compliant.

#### APPLICATIONS

- Embedded design
- POS, Headsets, Tablets
- Gateway, Access Point
- Telematics
- Tracking
- Healthcare
- M2M, Industrial devices
- Smart Grid
- OBD-II

#### Mechanical Specifications & Ordering Part Number

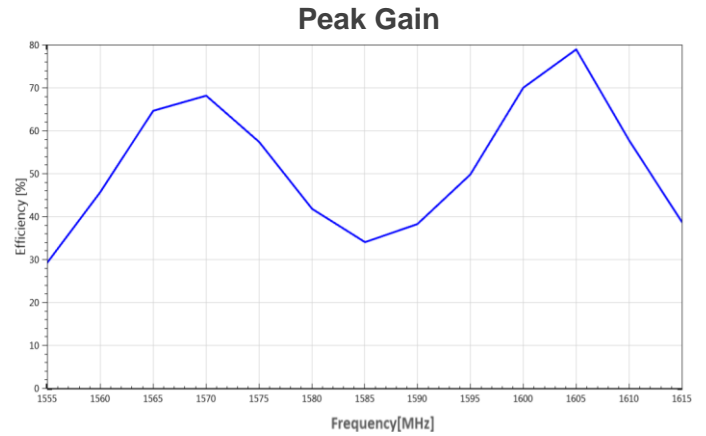
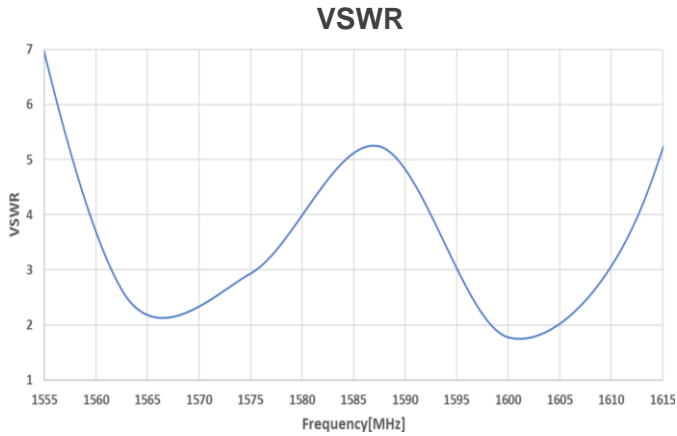
Ordering Part Number	1004322
Size (mm)	18.0 x 18.0 x 4.7
Mounting (mm)	Adhesive (Nitto 5000NS 15 x 15 x 0.16) & 1 through-hole Solder Pin
Packaging	Plastic Tray
Weight (grams)	6.2



GPS / GLONASS / Galileo / Beidou Patch Ethertronics' Embedded Antenna Specifications  
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

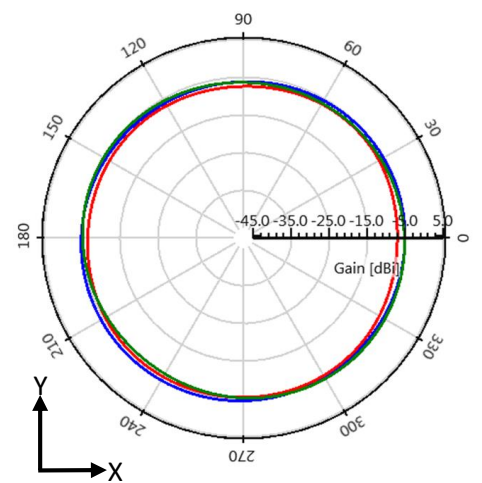
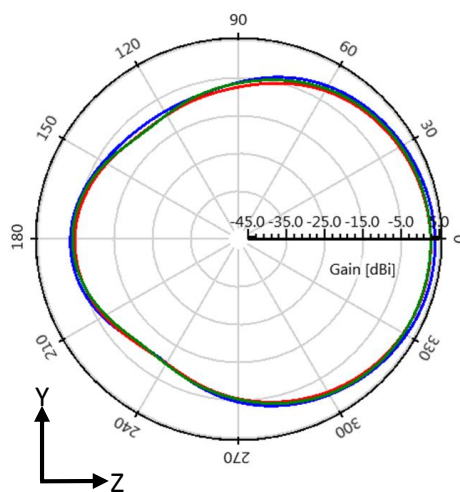
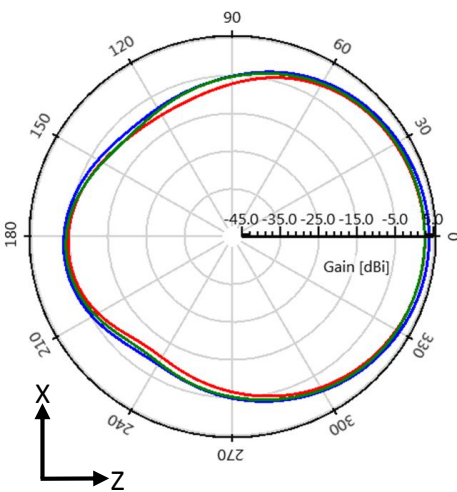
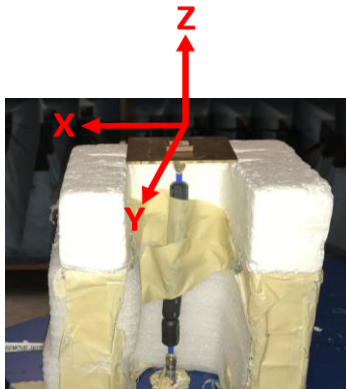
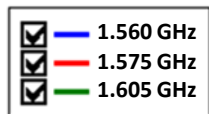
### VSWR and Peak Gain Plots

Typical performance on 70 x 70 mm PCB



### Radiation Patterns

Typical performance on 70 x 70 mm PCB  
measured @ 1.560, 1.575, 1.605 GHz



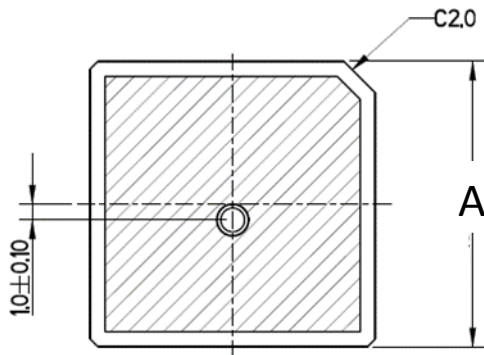


GPS / GLONASS / Galileo / Beidou Patch Ethertronics' Embedded Antenna Specifications  
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

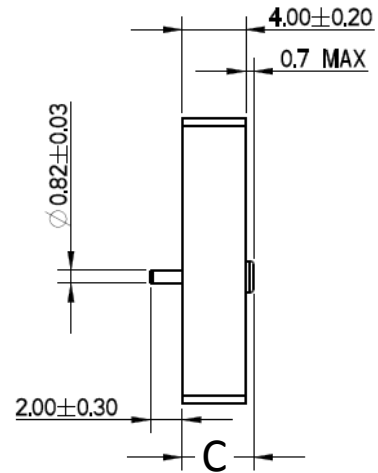
**Mechanical Dimensions**

Typical antenna dimensions (mm)

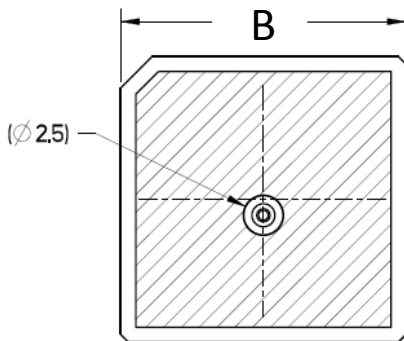
Part Number	A (mm)	B (mm)	C (mm)
1004322	18.0 ± 0.2	18.0 ± 0.2	4.7 (+0.2/-0.4)



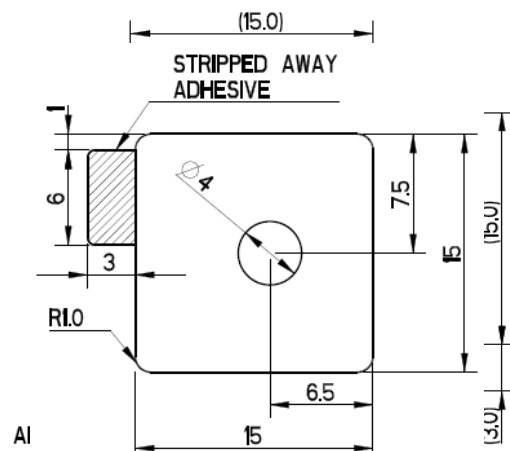
**Top View**



**Side View**



**Bottom View**



**Adhesive Liner View (Bottom)**