# PRODUCT: GPS/GNSS PATCH ANTENNA

Part No. 1002428

# Embedded GPS Ceramic Patch Antenna GPS/GNSS, 25x25x4 mm

ethertronics.



Ethertronics' series of GPS Ceramic Patch Antennas deliver on the key needs of device designers for higher functionality and performance in M2M designs. These innovative antennas provide compelling advantages for GPS enabled M2M applications such as vehicle tracking.

## **DESIGN ADVANTAGES**

### **Best in Class Performance**

- Circularly polarized patch antennas are designed to maintain high efficiency in a variety of device configurations.
- Minimal ground clearance and component "keep out" area.
- High selectivity eliminates the need for additional filters and frees up board space.

### Quicker Time-to-Market

- Standard part means fewer design changes.
- Simple implementation.
- Single part works for various PCB sizes and layouts.

### **RoHS Compliant**

• Ethertronics' antennas comply with the European RoHS Directive 2002/95/EC.

### Automotive Application

• Ethertronics' antennas are manufactured according to ISO TS 16949 quality standards.

More information is available on our Website at www.ethertronics.com/resources/.



# **KEY BENEFITS**

## END USER ADVANTAGES

### **Superior Range**

• Greater antenna efficiency means longer range and a better end user experience.

### **Exceptional Coverage**

 Better coverage results in improved performance in line of sight conditions as well as while inside cars or other areas where signal reflection occurs.

### **Faster Acquisition Times**

Users experience faster signal acquisition for GPS readings.

## SERVICE AND SUPPORT

### **Extensive RF Experience**

 Our ceramic patch antennas are supported by extensive documentation, and when needed, by the expertise of RF engineers who have integrated hundreds of antenna designs into wireless devices.

### **Global Operations & Design Support**

• Ethertronics' global operations encompass an integrated network of design centers that provide local customer support.

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## Ethertronics' Embedded GPS/GNSS Ceramic Patch Antenna Specifications Below are the typical specs for a GPS/GNSS applications.

## **Electrical Specifications**

Typical Characteristics once Patch is on GND plane 60x60mm and under plastic radome PC/ABS

Frequency (MHz)	S11 (dB)	Gain 0° XZ-Plane (dBic)	Polarization	Axial Ratio
1575.42	-11.55	5.26	RHCP	2 dB
1598	-12.93	4.25	RHCP	3 dB
1606	-13.95	3.46	RHCP	3 dB



**Return Loss in dB** 



Peak Gain in dBi



#### ETHERTRONICS

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### Efficiency, in %

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## **Mechanical Specifications**

Size	25 x 25 x 4 mm	
Mounting Adhesive (Nitto 5000NS 22x22x0.16mm) and Soldered Pin		
Packaging Tray		



Unit : mm



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