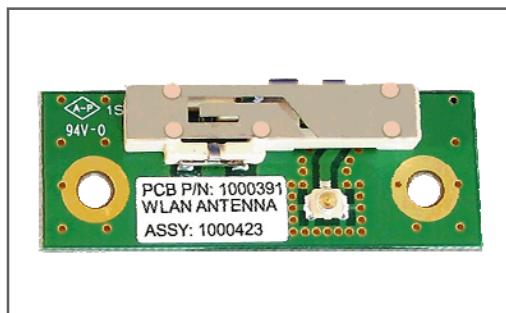


## Prestta™ WLAN Embedded Antenna

2.4/4.9/5.2/5.8 GHz (802.11 a/b/g/n + Japan)



Ethertronics' Prestta series of Isolated Magnetic Dipole™ (IMD) stamped metal antennas address the challenges facing today's product designers. IMD's high performance and isolation characteristics offer better connectivity and minimal interference.

IMD antennas can be used in a variety of devices:

- Notebook Computers
- Access Points
- Industrial Handhelds
- WiFi enabled Televisions & Monitors

## TECHNOLOGY ADVANTAGES



### Stays in Tune

IMD antenna technology provides superior RF field containment, resulting in less interaction with surrounding components. Ethertronics IMD antennas **resist de-tuning**; providing a robust radio link regardless of the usage position.

Prestta WLAN antennas use patented IMD technology in a stamped metal configuration to provide high performance. IMD antennas requires a smaller design keep-out area, carry lower program development risk which yields a quicker time-to-market, without sacrificing RF performance.



## KEY BENEFITS

### DESIGN ADVANTAGES

#### Quicker Time-to-Market

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

#### Greater Flexibility

- Ethertronics' first-in-class IMD technology enables you to develop concept designs that are more advanced and that deliver superior performance in reception-critical applications.
- U.FL Connector located on the PCB allows for custom cable lengths to fit a variety of devices

#### On-Ground Antenna

- Placement flexibility in devices without requiring ground clearance

#### RoHS Compliant

- Ethertronics' antennas are fully compliant with the European RoHS Directive 2002/95/EC.

### END USER ADVANTAGES

#### Unique Form Factors Support Advanced Industrial Designs

- Smaller, more efficient IMD embedded antennas break through restrictive design rules and provide new freedom in component placement.

#### Superior Range & Signal Strength

- Better antenna function means longer range and greater sensitivity to critically precise signals—delivering greater customer satisfaction while building brand loyalty.

### SERVICE AND SUPPORT

#### Extensive RF Experience

- Our WLAN antennas are supported by 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 supports an integrated network of design centers that can take projects from concept to production.

## PRODUCT: WLAN a/b/g/n + Japan

### Ethertronics' Internal (Embedded) Antenna Specifications.

Below are the typical specs for a WLAN application.

#### Electrical Specifications

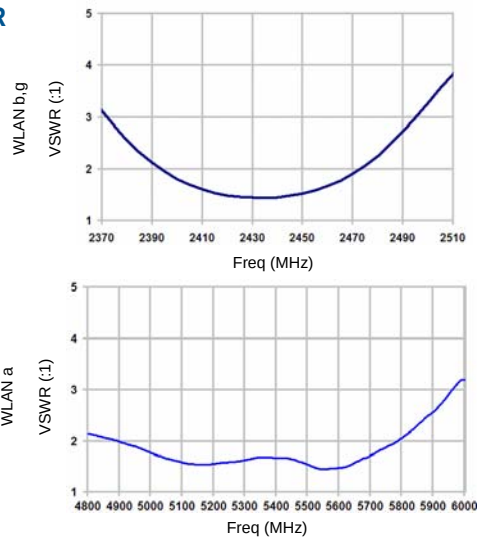
Typical Characteristics

| WLAN a/b/g/n + Japan<br>Antenna (GHz) | 2.390-2.490<br>b, g                        | 4.900-5.100<br>Japan | 5.150-5.350<br>a | 5.70-5.900<br>a |
|---------------------------------------|--------------------------------------------|----------------------|------------------|-----------------|
| Peak Gain                             | -0.6dBi                                    | 2.5dBi               | 4.5dBi           | 3.5dBi          |
| Average Efficiency                    | 55%                                        | 71%                  | 75%              | 65%             |
| VSWR Match                            | 3.0:1 max                                  | 2.5:1 max            | 2.5:1 max        | 3.0:1 max       |
| Feed Point Impedance                  | 50 $\Omega$ unbalanced (other if required) |                      |                  |                 |

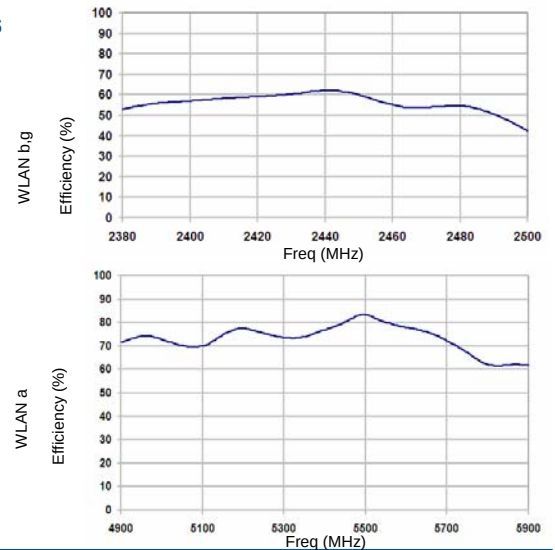
#### Mechanical Specifications

|                   |                                                           |
|-------------------|-----------------------------------------------------------|
| Dimensions        | 26.7 x 5.0 x 7.1 mm (Antenna); 40.0 x 15.0 x 1.2 mm (PCB) |
| Weight            | 1.6 g                                                     |
| Cable / Connector | Contact Ethertronics for details.                         |
| Cable Length      | 150 mm, 300mm 450mm, 600mm available                      |

#### VSWR



#### Efficiencies



#### Antenna Radiation Patterns

Typical Performance

