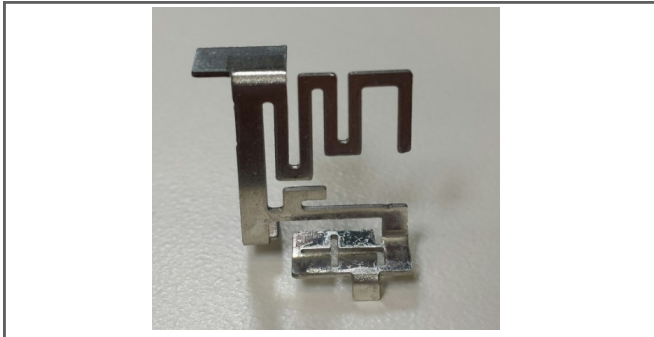


Prestta™ WLAN with through hole features – Embedded Antenna
2.4 GHz (802.11 b/g/n)



KEY BENEFITS

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:

- Access Points, Gateways, Routers
- Industrial Handhelds
- WiFi enabled Televisions & Monitors
- STB
- M2M

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.

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.

RoHS Compliant

- Ethertronics' antennas are fully compliant with the European RoHS Directive 2011/65/EU.

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: Embedded Dual Band antenna WLAN b/g/n - 1002295

Ethertronics' Internal (Embedded) Antenna Specifications.

Below are the typical specs.

Electrical Specifications

Typical Characteristics on
120x180mm PCB

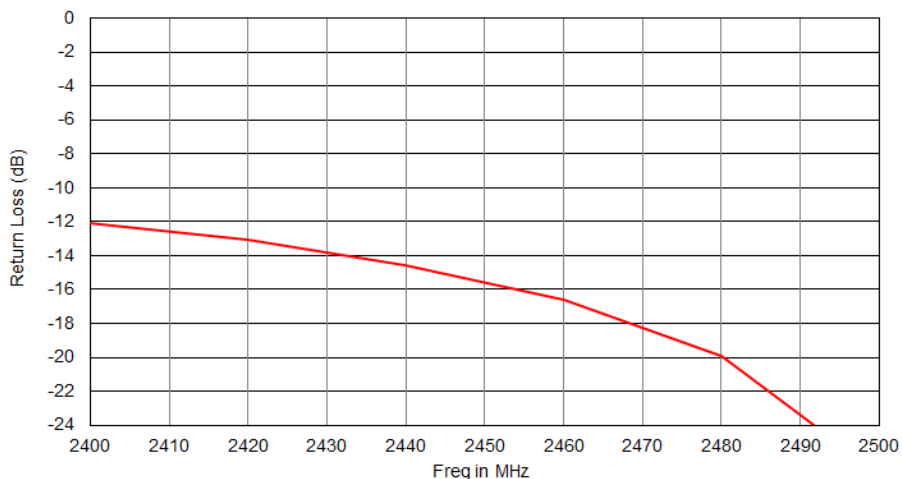
| | 2.400 - 2.485 GHz |
|----------------------|------------------------|
| Peak Gain | 2.95 dBi |
| Average Efficiency | 70% |
| Return Loss | ≤ -10 dB |
| Feed Point Impedance | 50 Ω unbalanced |

Mechanical Specifications

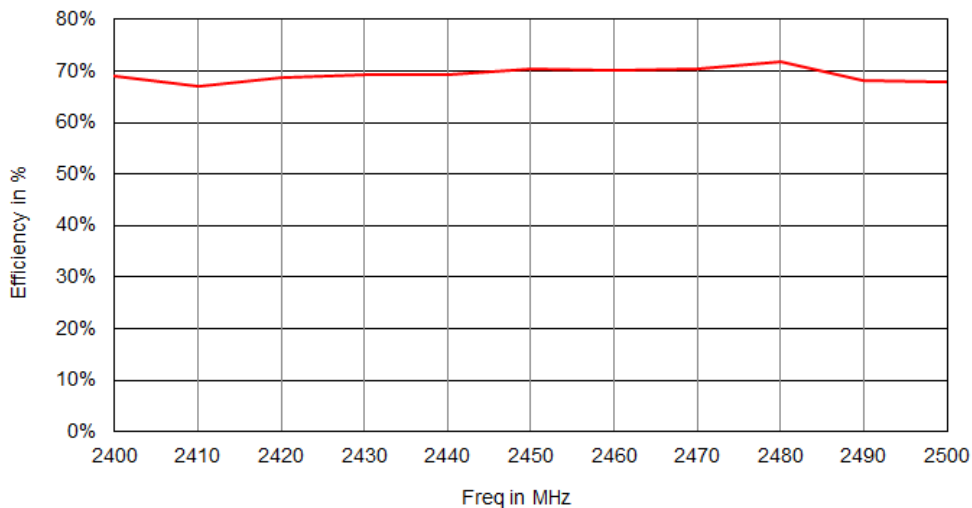
Typical Characteristics on
120x180mm PCB

| | |
|------------|---|
| Dimensions | 15.60 x 16.10 x 9.70 mm (thickness 0.5mm) |
| Weight | 0.75g |
| Packaging | Delivered in Trays. |

Return Loss in the 2.4GHz band



Efficiency in the 2.4GHz band in %



ETHERTRONICS

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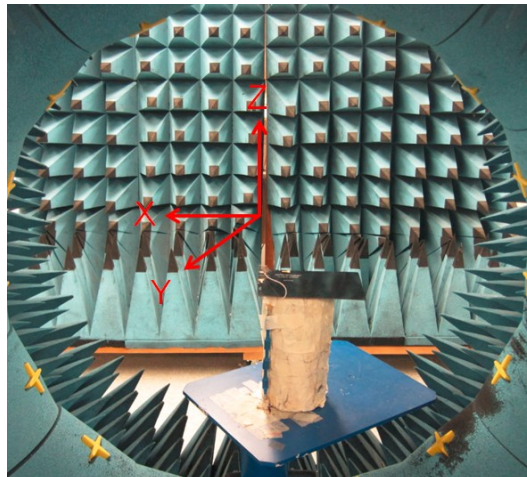
PRODUCT: Embedded Dual Band antenna WLAN b/g/n - 1002295

Ethertronics' Internal (Embedded) Antenna Specifications.

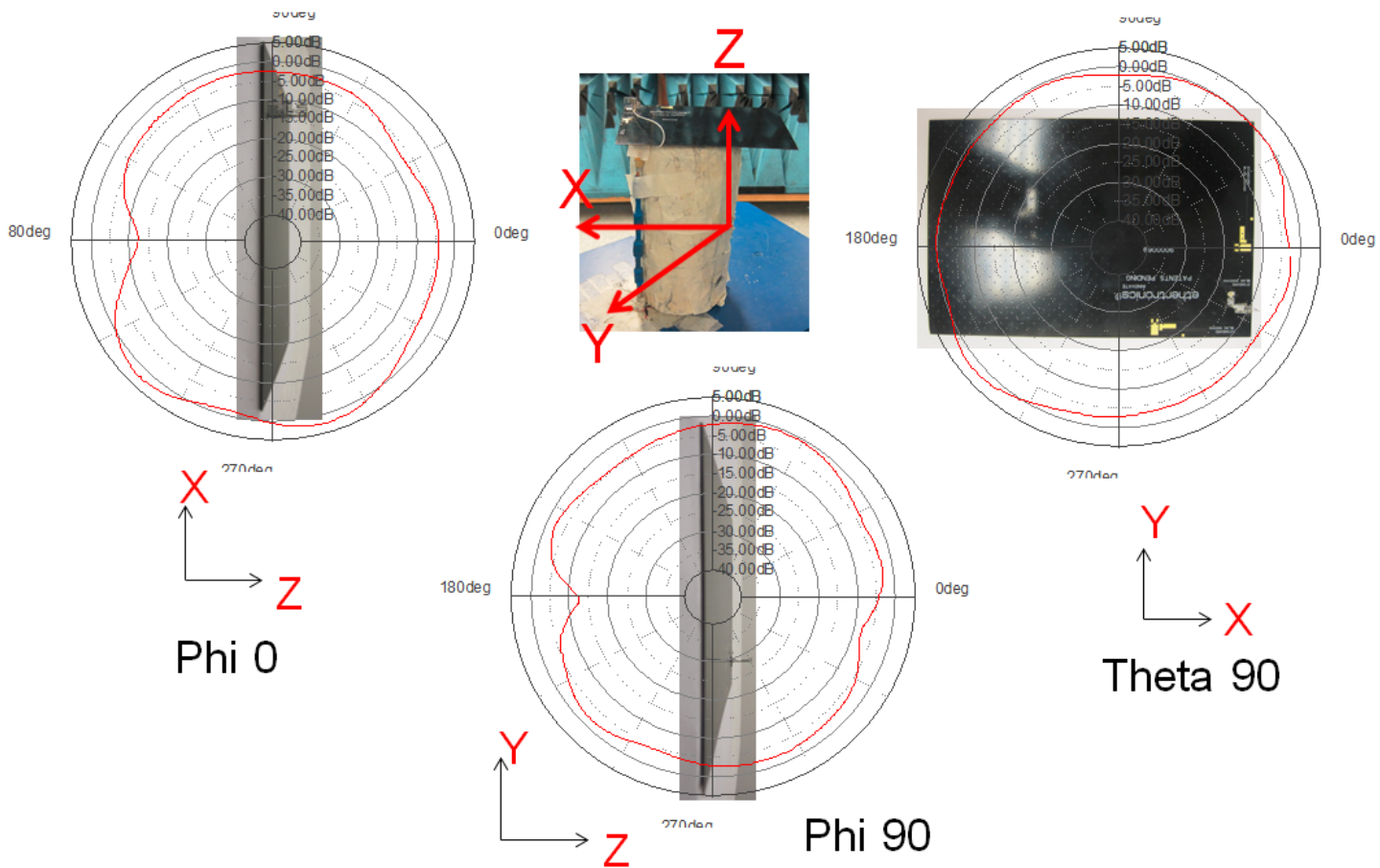
Below are the typical specs.

Radiation Patterns Set-Up

Typical Characteristics on 120x180mm PCB



Radiation Patterns at 2.44 GHz band

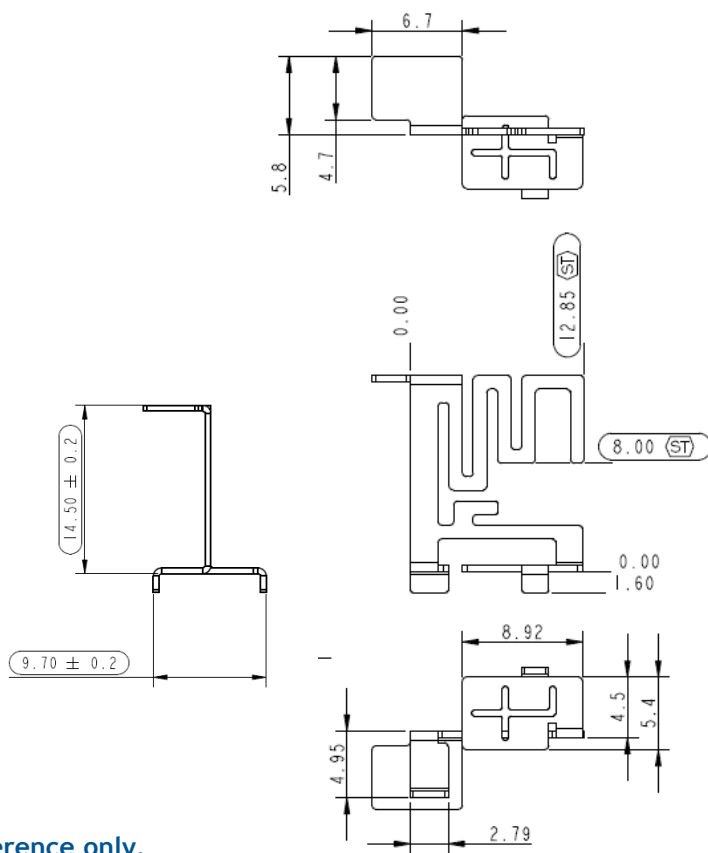
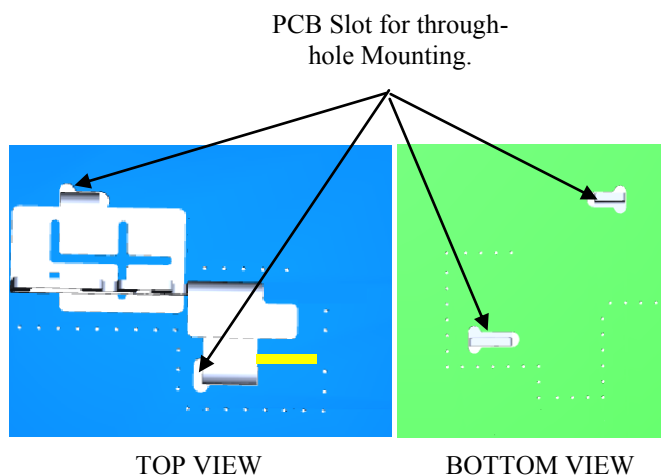


PRODUCT: Embedded Dual Band antenna WLAN b/g/n - 1002295

Ethertronics' Internal (Embedded) Antenna Specifications.

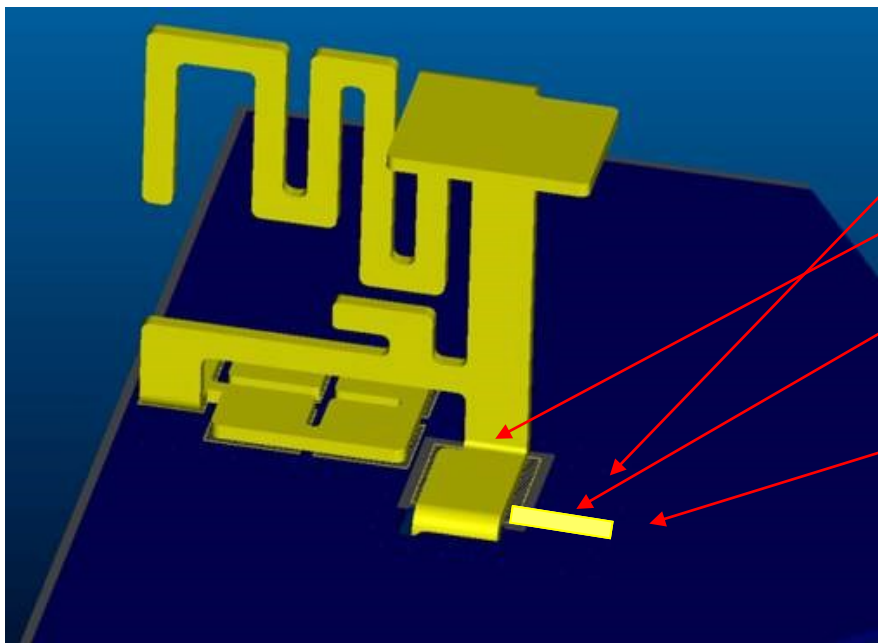
Below are the typical dimensions and footprint.

Main Dimensions (in mm)



*Dimensions and Tolerances on data sheet are for reference only.

3D View of Antenna on PCB



Clearance Needed around the Feed pad only.

Au plated Pads for GND connection.

Au plated Feed Pad

Based upon Final PCB stack-up, a 50 Ohms line needs to be designed and connected at this location.