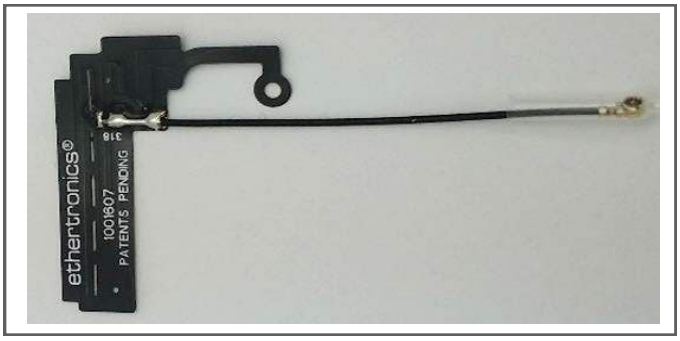
ethertronics INNOVATE

PRODUCT: Embedded Pentaband Antenna

Part No. 1001607

Prestta™ Pentaband Antenna

824MHz-2170MHz



Ethertronics' Prestta series of Isolated Magnetic Dipole™ (IMD) embedded antennas address the challenges facing today's product designers. IMD's high performance and isolation characteristics offer better connectivity and minimal interference. Prestta antennas can be used in a variety of applications in-cluding:

- M2M
- Automotive
- Automatic Meter Reading
- Healthcare
- Point of Sale
- Tracking

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 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

Reduced Costs and Time-to-Market

- Standard antenna eliminates design fees and cycle time associated with a custom solution; getting products to market faster.

Greater Flexibility with Unique Form Factors

- Ethertronics' IMD technology helps you deliver more advanced ergonomic designs without adverse impact on product performance.
- SMD mountable design enables faster and lower cost manufacturing.

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

- 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 Prestta 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.

ETHERTRONICS
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PRODUCT: Embedded Pentaband Antenna — P/N 1001607

Ethertronics' Embeded Pentaband Antenna Specifications.

Electrical Specifications

Typical Characteristics

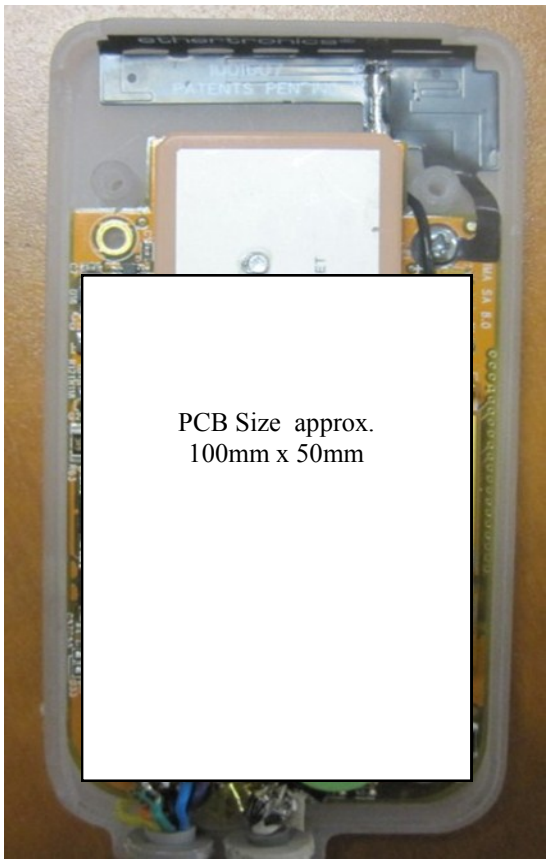
Measurements taken once antenna affixed in the customer's box.

	824-960 MHz and 1710-2170 MHz
Peak Gain	Low Band: > 2.0 dBi, High band: > 0 dBi
Peak Efficiency	50% in the Device in both bands
Return Loss	< -6 dB
Feed Point Impedance	50 ohms unbalanced (other if required)
Power Handling	2 Watt CW
Polarization	Linear

Mechanical Specifications

Maximum Dimensions	43.15 x 77.95 x 0.20 mm (1.25 max height at cable solder location)
Feed Cable Assembly details	66 mm RF cable length u.fl compatible connector, 1.13mm diameter
Ground FPC connection	Usage of screw to main PCB.

Setup Configuration



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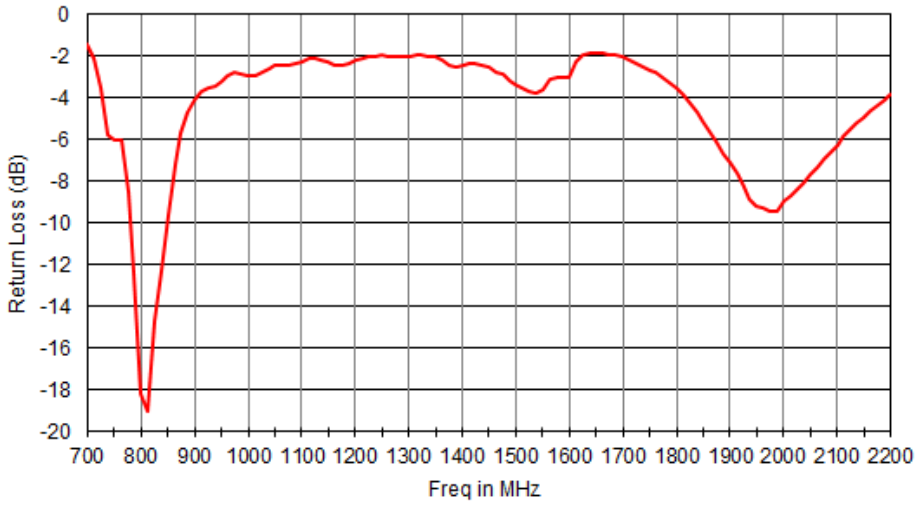
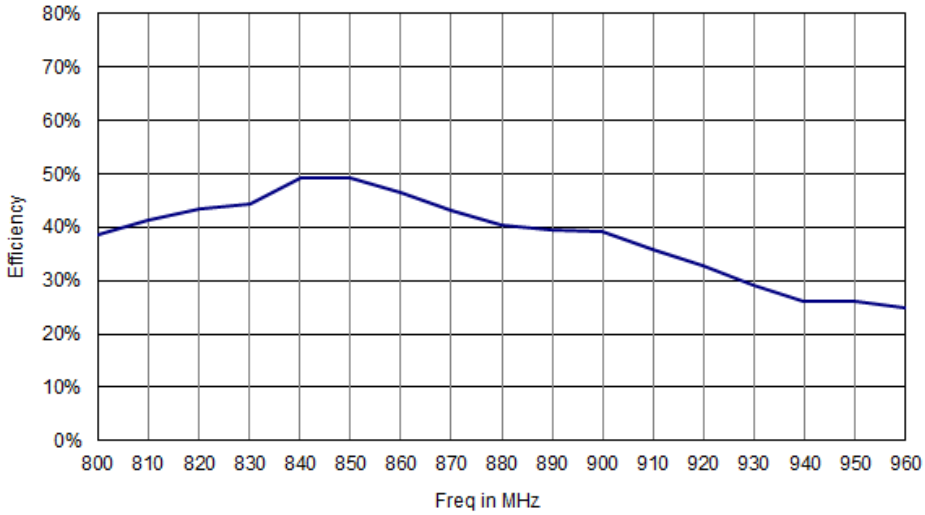
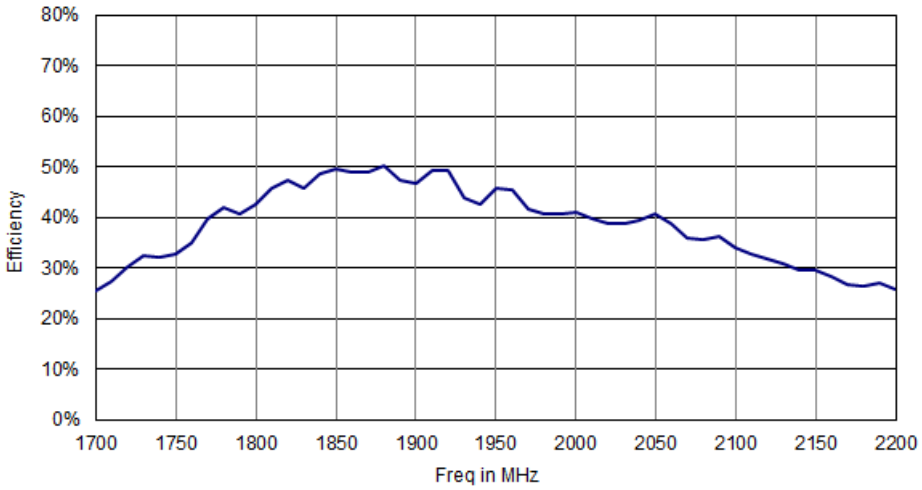
Return Loss in dB



Efficiency in the low band in %



Efficiency in the high band in %



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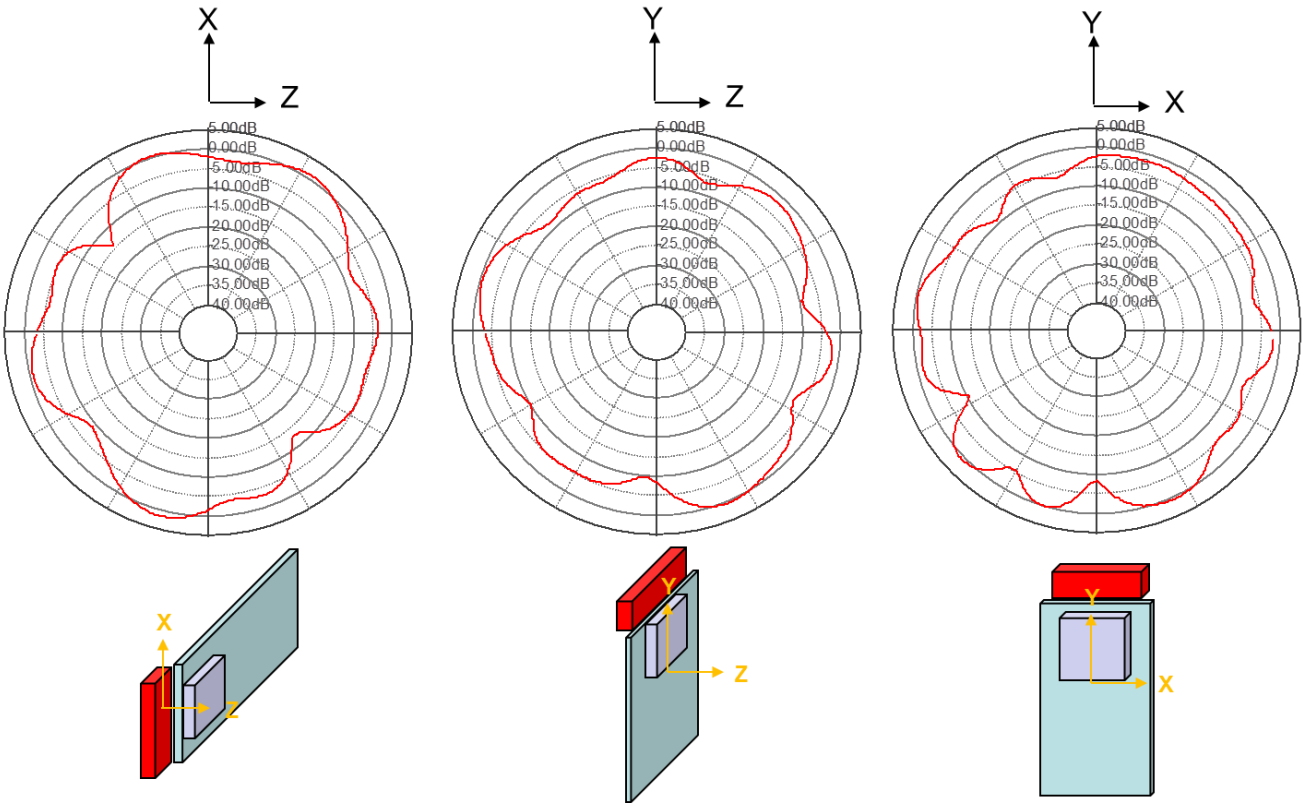
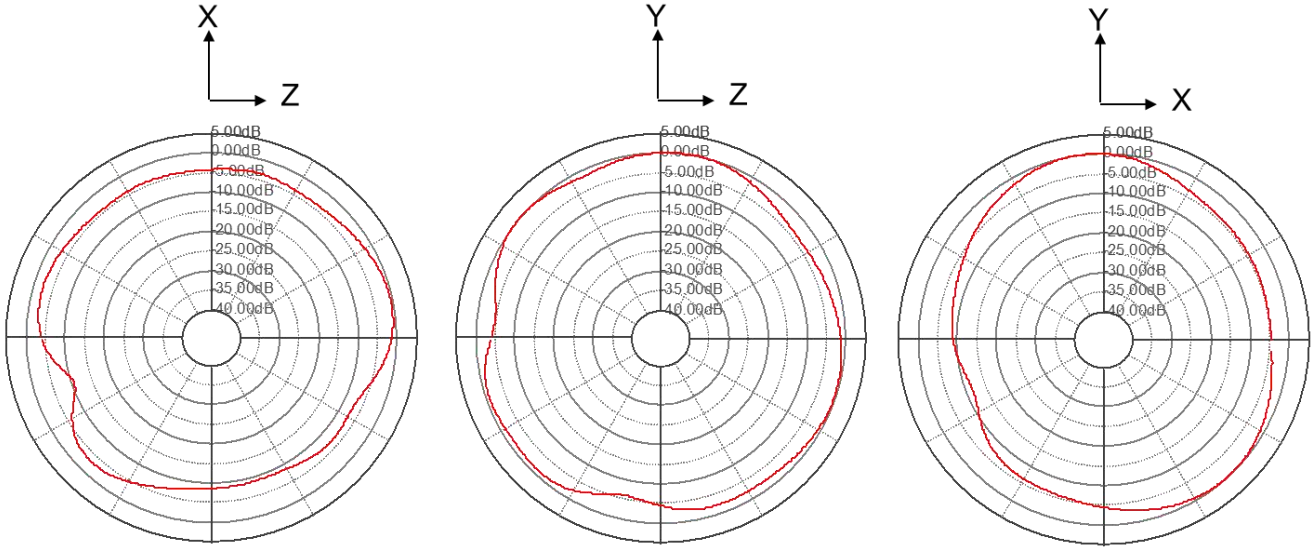
Radiation Patterns at 850MHz



Radiation Patterns at 1880MHz



Main Dimensions in mm