

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) trace 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:

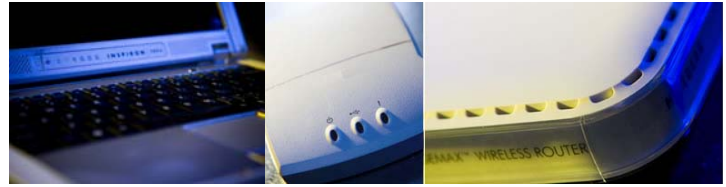
- Notebook Computers
- Access Points
- WiFi enabled Televisions & Monitors

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 trace 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.
- Multiple cable lengths to fit a variety of devices.

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

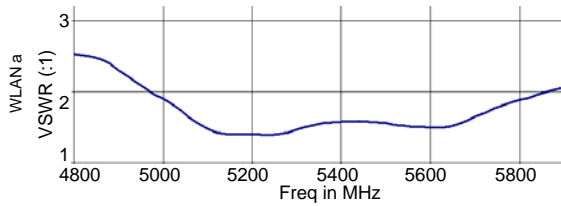
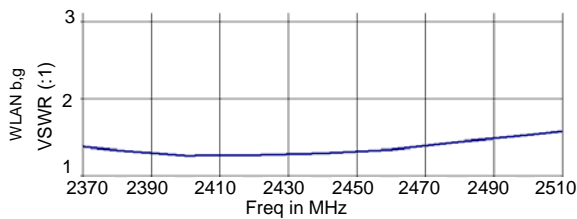
Typical Characteristics
(In reference device housing made of PC/ABS plastic)

WLAN a/b/g/n + Japan Antenna (GHz)	2.390-2.490 b, g	4.900-5.100 Japan	5.150-5.350 a	5.70-5.900 a
Peak Gain	1.5-2.5 dBi	3.0-5.0 dBi	3.0-5.0 dBi	3.0-5.0 dBi
Efficiency	65%	65%	65%	50%
VSWR Match	<2.0:1	<2.5:1	<2.0:1	<2.5:1
Feed Point Impedance	50 Ω unbalanced (other if required)			

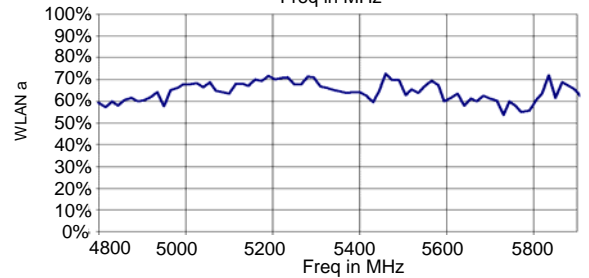
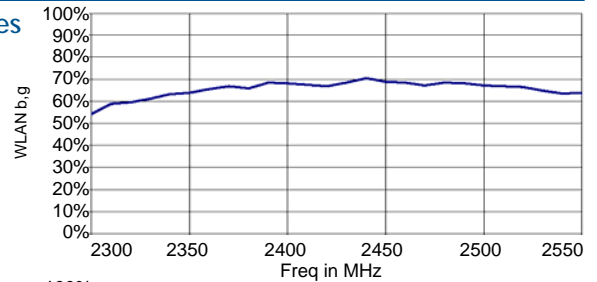
Mechanical Specifications

Dimensions	35.2 x 8.5 x 0.85 mm
Weight	0.5 g
Cable / Connector	Contact Ethertronics for details.
Cable Length	1000615–1000602 Antenna with 100 mm cable 1000617–1000602 Antenna with 150 mm cable 1000668–1000602 Antenna with 50 mm cable 1000672–1000602 Antenna with 200 mm cable

VSWR

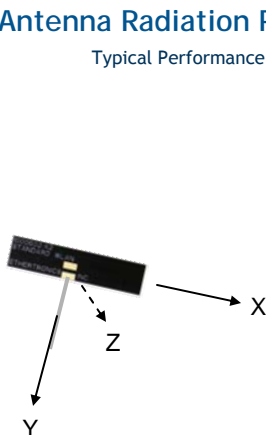


Efficiencies



Antenna Radiation Patterns

Typical Performance



2.390-2.490 GHz Band

4.900-5.900 GHz Band

