

Presta™ WLAN Embedded Antenna

4.9/5.2/5.8 GHz (802.11a + 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

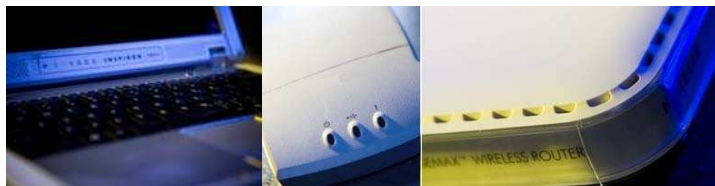
TECHNOLOGY ADVANTAGES



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.

Presta 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

Ethertronics' Internal (Embedded) Antenna Specifications
 Below are the typical specs for a WLAN application.

Electrical Specifications

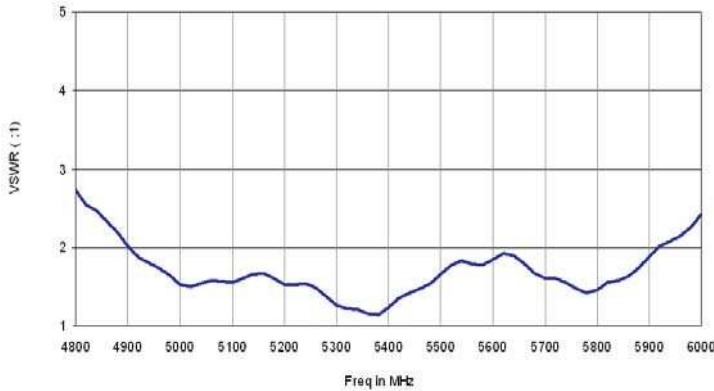
Typical Characteristics
 (In reference device housing
 made of PC/ABS plastic)

WLAN a + Japan Antenna (GHz)	4.900-5.100 Japan	5.150-5.350 a	5.70-5.900 a
Peak Gain	2.0-4.0 dBi	2.0-4.0 dBi	2.0-4.0dBi
Efficiency	65%	65%	60%
VSWR Match	<2:1	<2:1	<2:1
Feed Point Impedance	50 Ω unbalanced (other if required)		

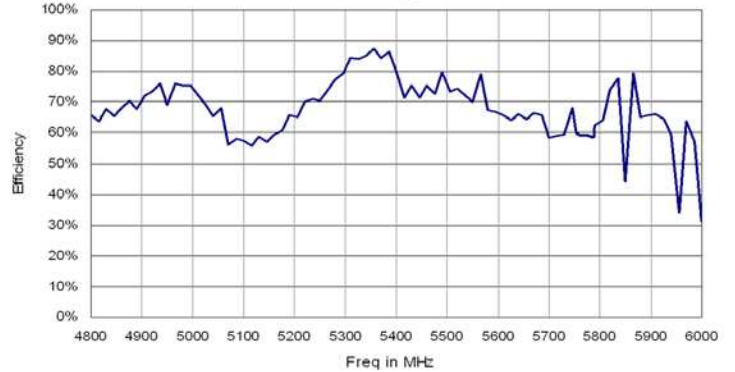
Mechanical Specifications

Dimensions	15.9 x 7.6 x 0.85 mm (2.2mm high at cable solder connection)
Weight	0.2g (antenna only)
Cable / Connector	Contact Ethertronics for details.
Cable Length	1000799—Antenna with 100 mm cable 1000804—Antenna with 150 mm cable 1000820—Antenna with 200 mm cable

VSWR



Efficiency



Antenna Radiation Patterns

Typical Performance

