

Presta™ WLAN
Embedded Antenna
2.4/4.9/5.2/5.8 GHz (802.11 a/b/g/n + Japan)



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.

Ethertronics' Presta 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

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.

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.

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 - P/N 9000129 & 9000130

Ethertronics' Internal (Embedded) Antenna Specifications.

Below are the typical specs for a WLAN application.

Electrical Specification

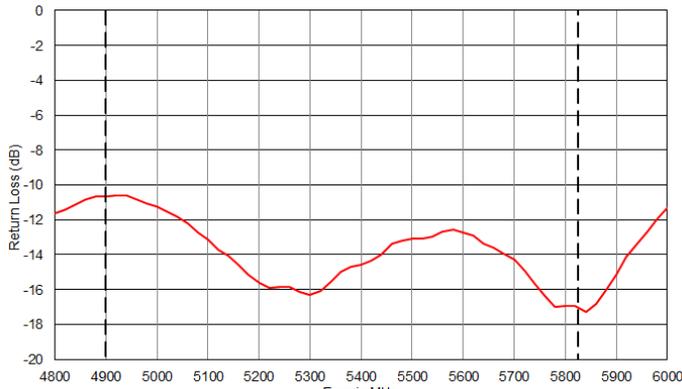
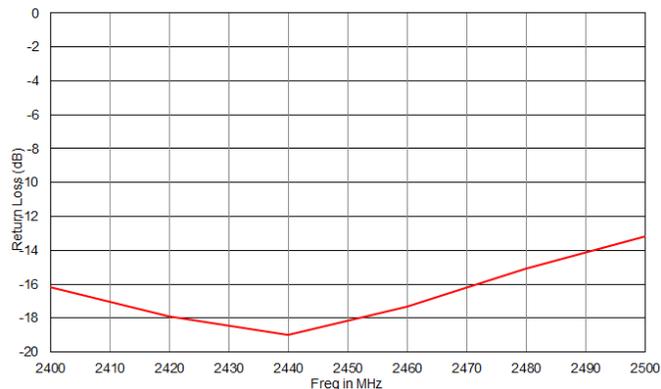
Typical Characteristics
(In reference device housing made of PC/ABS plastic)

WLAN a/b/g/n + Japan Antenna (GHz)	2.390-2.490 b, g	4.900-5.100 Japan	5.150-5.350 a	5.35-5.90 a
Peak Gain in dBi	2.0	4.0	5.0	6.0
Efficiency	65%	72%	72%	65%
Return Loss in dB	< -10.0	< -10.0	< -10.0	< -10.0
Feed Point Impedance	50 Ω unbalanced (other if required)			

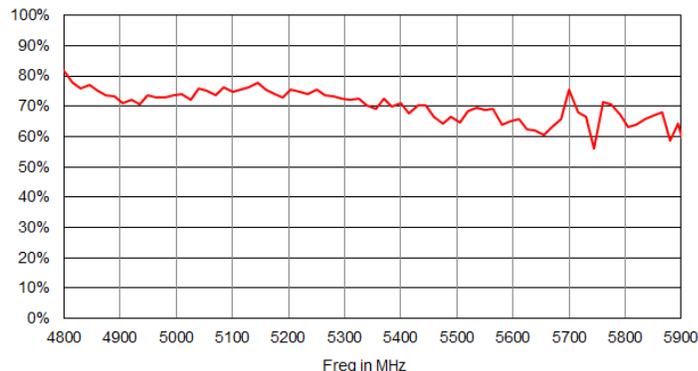
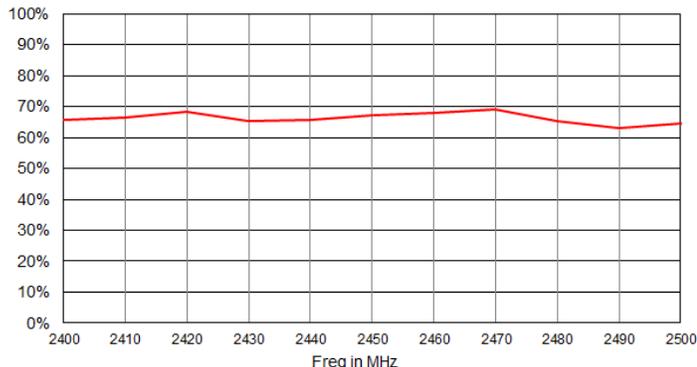
Mechanical Specification

Dimensions	42.0 x 8.0 x 0.8 mm
Weight	0.4 g
Cable / Connector	U.fl Connector, 1.13mm diameter coaxial cable.
Cable Length	100mm cable
Main Antenna Substrate	P/N 9000129: Based on PCB substrate P/N 9000130: Based on FPC substrate

Return Loss in dB



Efficiency in %



ETHERTRONICS

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