

Part No. 1000146

WIFI Prestta™ Stamp Metal Antennas

2.4 GHz, 5 GHz



Ethertronics' Prestta series of Isolated Magnetic Dipole™ (IMD) antennas deliver on the key needs of device designers for higher functionality and performance in smaller/thinner designs. These innovative antennas provide compelling advantages for a full WIFI dual band enabled handheld devices, media players and other mobile devices.

Real-World Performance and Implementation

Other antennas may contain simple PiFA or monopole designs that interact with their surroundings, complicating layout or changing performance with use position. Ethertronics' antennas utilize patented IMD technology to deliver a unique size and performance combination.

Prestta™ Antennas

WIFI

2.4 & 5 GHz

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.

KEY BENEFITS

Stay-in-Tune

IMD antenna technology provides superior RF field containment, resulting in less interaction with surrounding components.

Quicker Time-to-Market

By optimizing antenna size, performance and emissions, customer and regulatory specifications are more easily met.

Reliability

Products are the latest RoHS version compliant

APPLICATIONS

- Embedded design
- Cellular, Headsets, Tablets
- Gateway, Access Point
- M2M, Industrial devices
- Handheld

Electrical Specifications

Typical Characteristics, on 120 x 180 mm PCB

WLAN a/b/g Frequency	2.4 - 2.5 GHz (b,g)	4.9 - 5.8 GHz (a)
Peak Gain	2.5 dBi	3.5 dBi
Average Efficiency	81%	75%
VSWR Match	1.6:1 max	2.0:1 max
Feed Point Impedance	50 ohms unbalanced	
Polarization	Linear	
Power Handling	0.5 Watt CW	

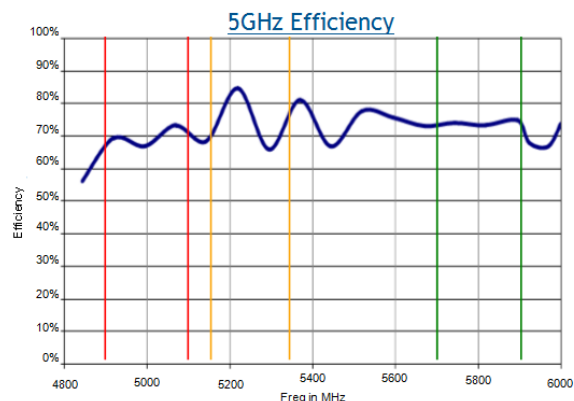
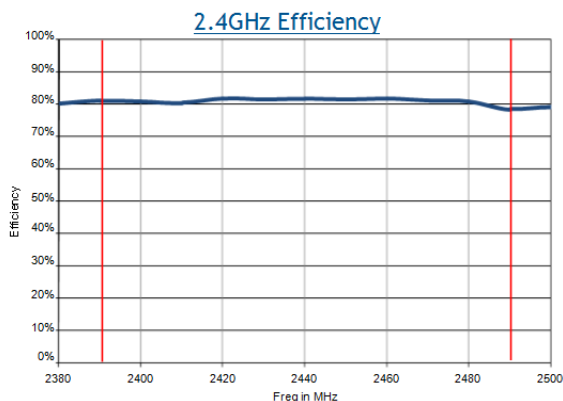
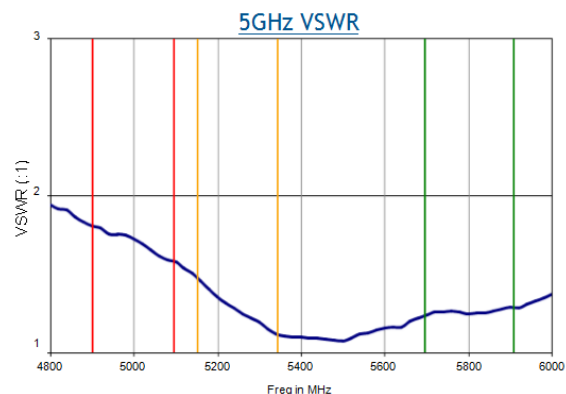
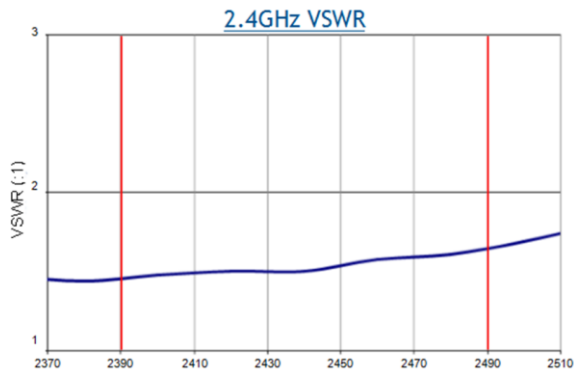
Mechanical Specifications

Size	17.9 x 6.9 x 4.3 mm
Mounting	Surface mount
Weight	0.5 g
Packaging	Tape & Reel, 1000146 – 1,200 pieces per reel
Demo Board	1000146-01

2.4/5GHz Ethertronics' Prestta™ Embedded Antenna Specifications
 Ethertronics produces a wide variety of standard and custom antennas to meet user needs.
 Below are the typical performances.

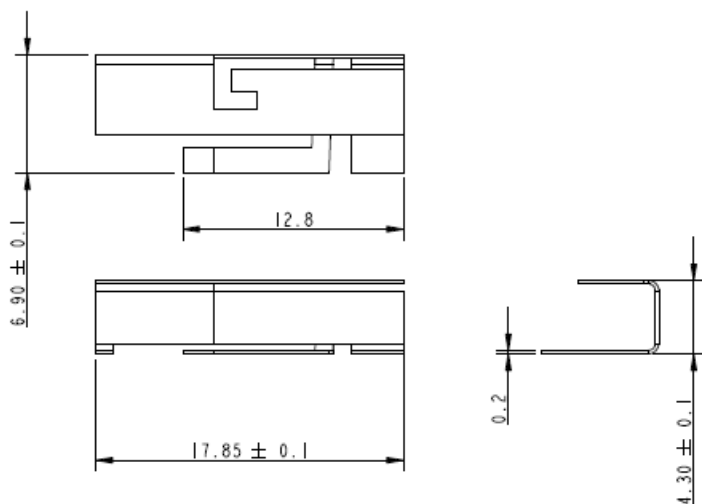
Typical Return Loss and Efficiency Plots

Measured on 120x180mm demo board



Antenna Layout

For references only, tuning varies based on application

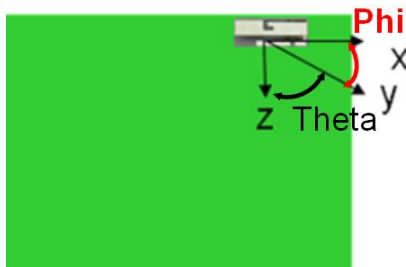


*All dimensions provided in this document are for informational purposes only.

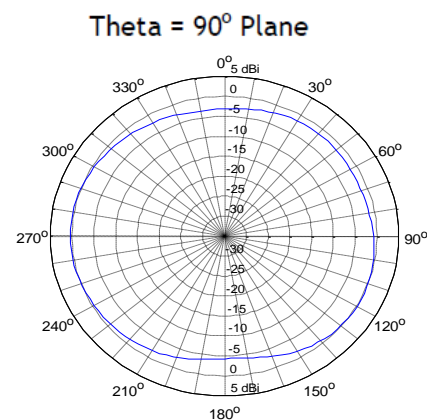
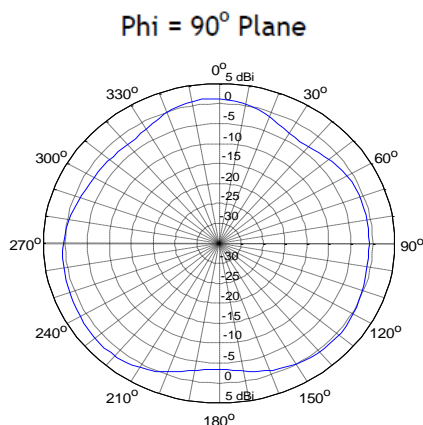
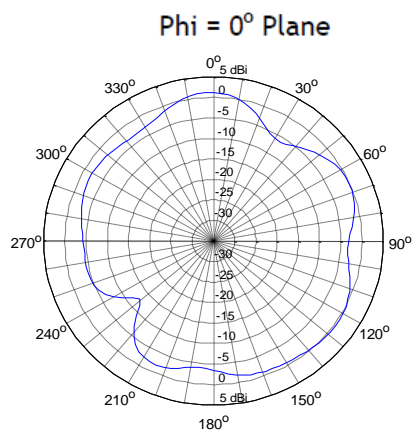
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Antenna Radiation Patterns

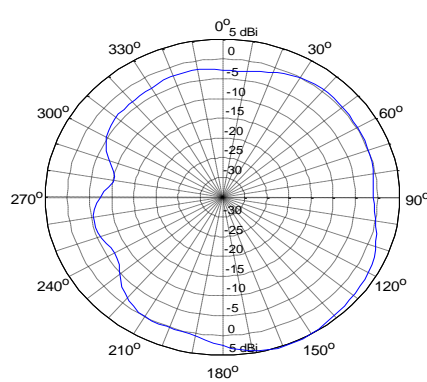
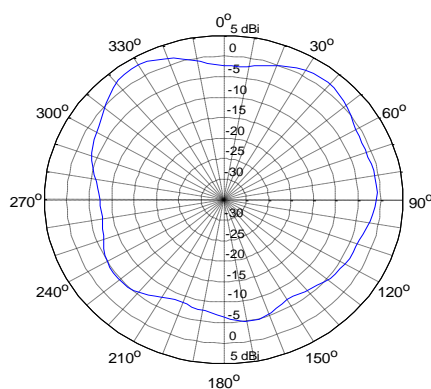
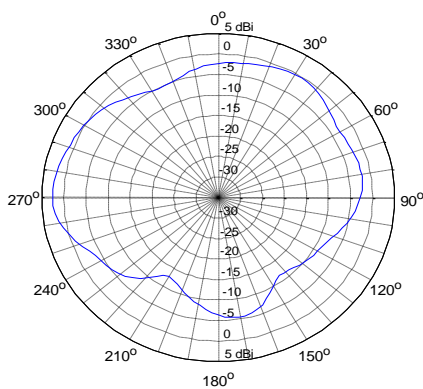
Typical Performances on Ethertronics' 120 x 180 mm PCB Test Board



**Measured at 2.4 GHz
WLAN b,g**



**Measured at 5.1 GHz
WLAN a**



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