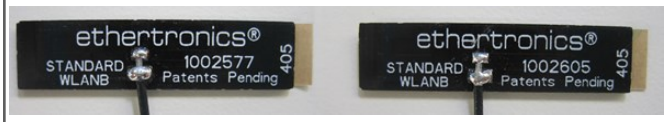
ethertronics®
INNOVATE

PRODUCT: 802.11 b/g/n

Part No. 1002577 - 1002605

Prestta™ WLAN Embedded Antennas

Single Band 2.4GHz



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 & Tablets
- Access Points, Gateways, STB
- WiFi enabled Televisions & Monitors
- Trackers...

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.

ETHERTRONICS

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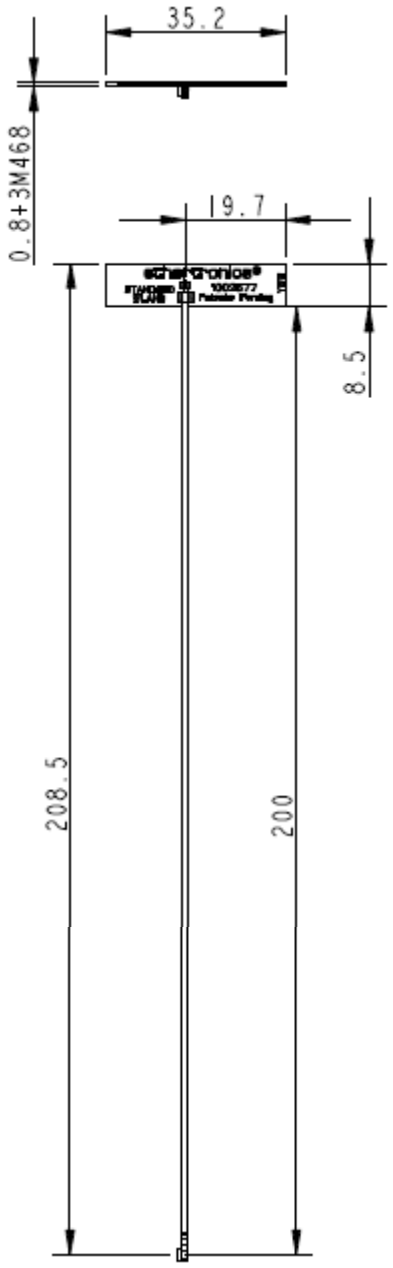
PRODUCTS: P/N 1002577 - 1002605

Ethertronics' Internal (Embedded) Antenna Specifications.

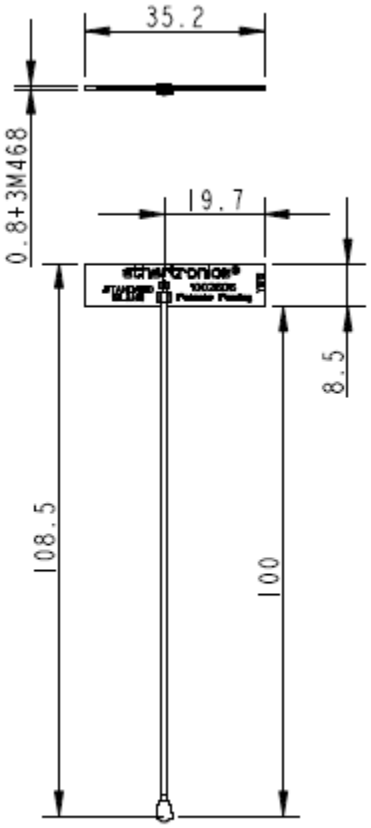
Below are the typical specs.

Overall Dimensions:

Antenna 2G1
P/N 1002577



Antenna 2G2
P/N 1002605



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Mechanical Specifications

Dimensions	35.2 x 8.5 x 0.80 mm
Weight	Approx. 0.30 g
Cable Information	**2G1 Antenna** **P/N 1002577** (200 mm cable, 1.13mm diameter, 3M468) **2G2 Antenna** **P/N 1002605** (100 mm cable, 1.13mm diameter, 3M468)

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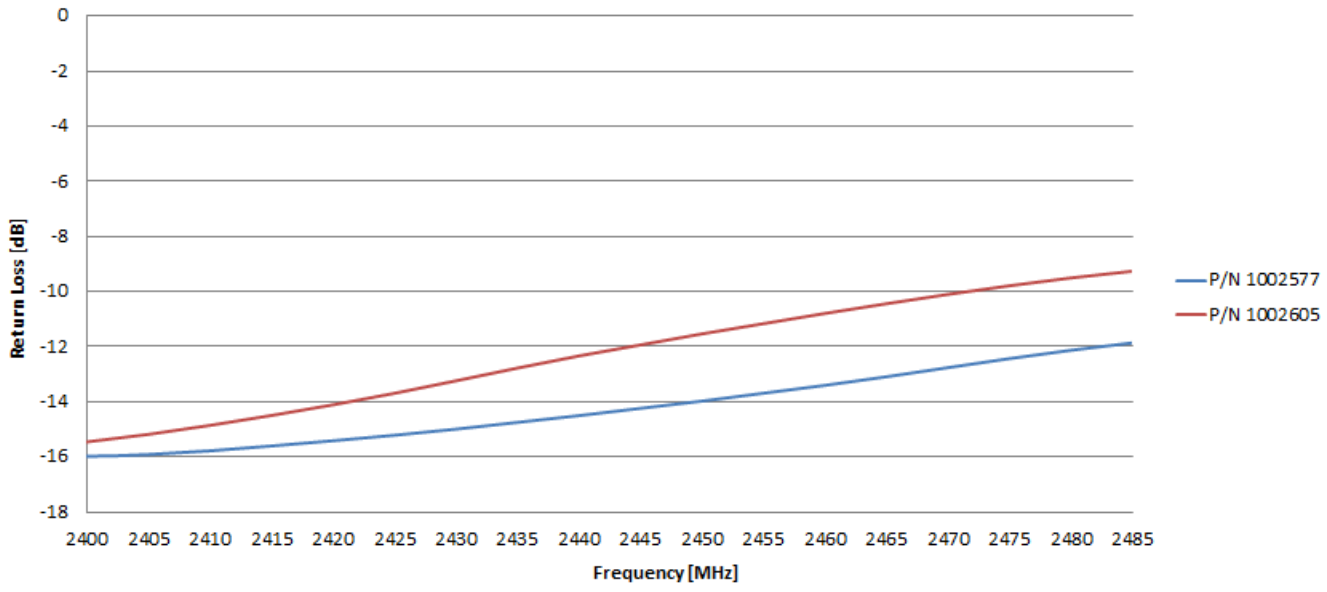
Electrical Performance Summary:

	P/N 1002577 2G1 2.4 – 2.485GHz	P/N 1002605 2G2 2.4 – 2.485GHz
Peak Gain	1.66 dBi	3.35 dBi
Efficiency	60.8 %	64.7 %
Return Loss	≤ -12 dB	≤ -9 dB
Input Impedance	50 Ohm unbalanced	50 Ohm unbalanced
Isolation	≤ -26 dB with all other antennas	≤ -26 dB with all other antennas

Return Loss Plots



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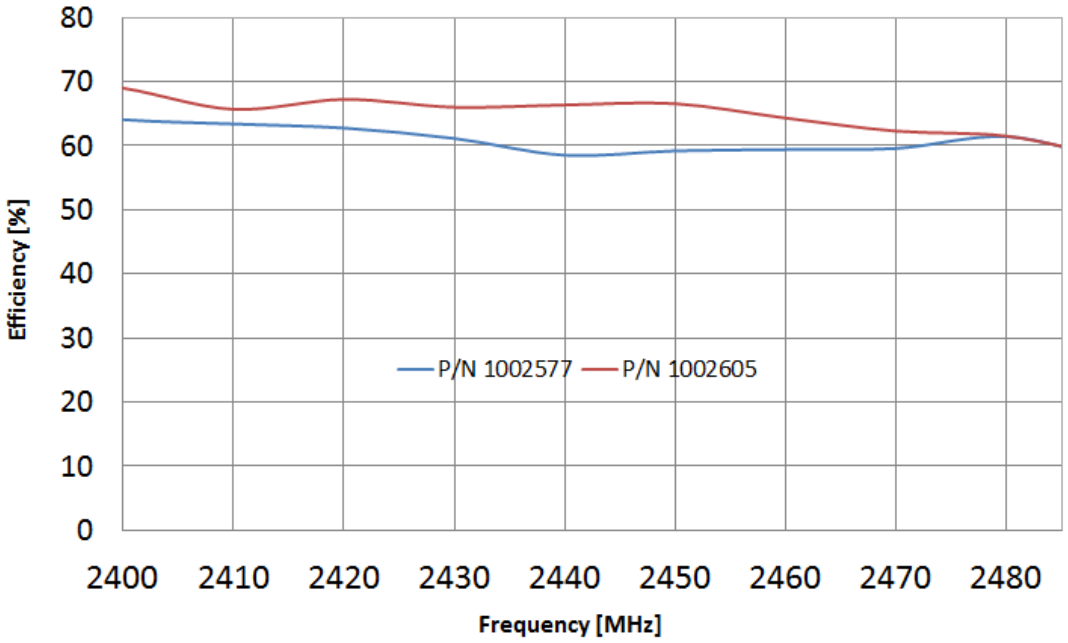
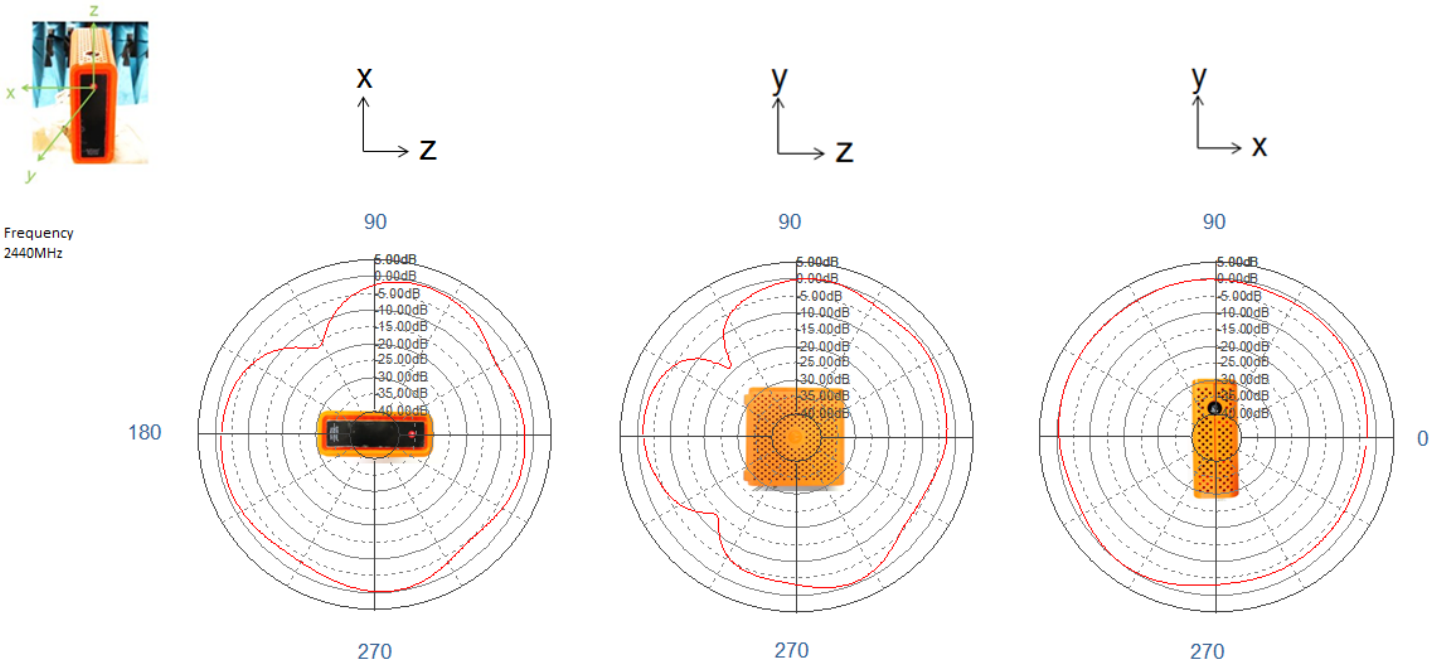
Efficiency Plots:



Radiation Patterns of the 2G1 (P/N 1002577) Antenna at 2.44GHz



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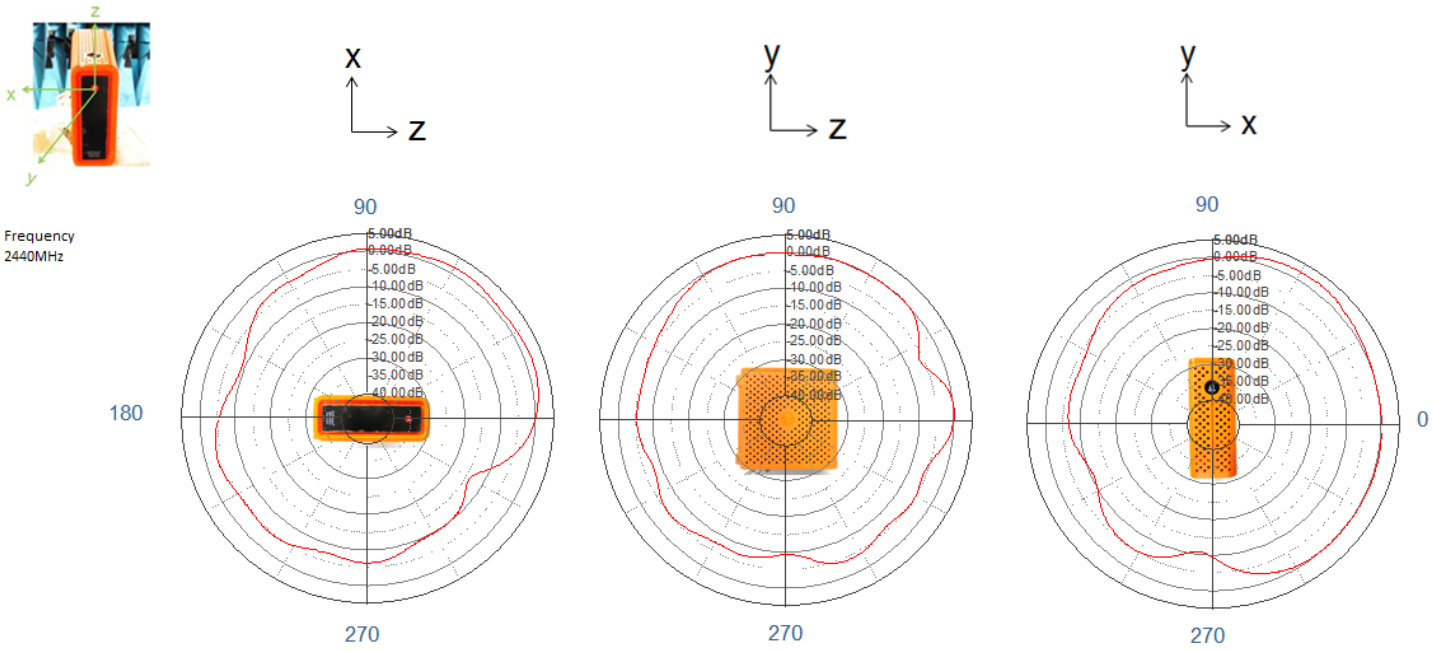
PRODUCTS: P/N 1002577 - 1002605

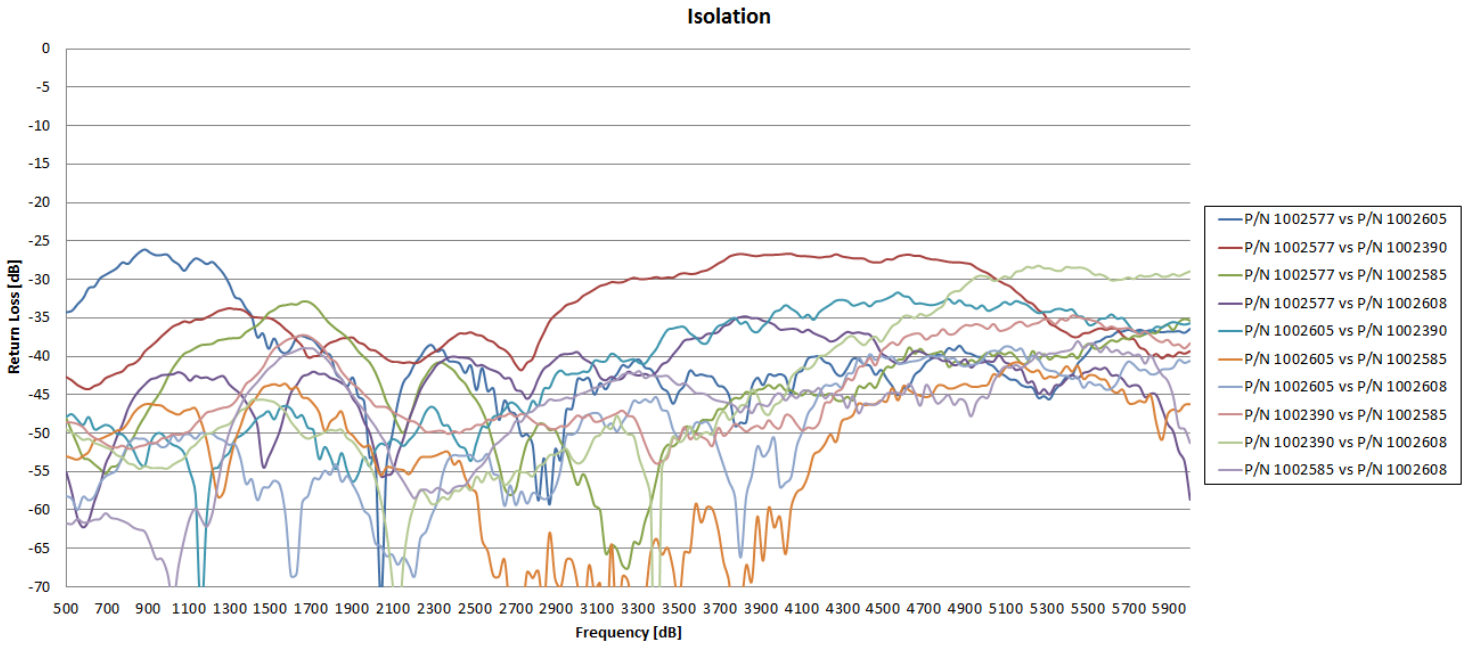
Ethertronics' Internal (Embedded) Antenna Specifications.

Below are the typical specs.

Radiation Patterns of the 2G2 (P/N 1002605) Antenna at 2.44GHz



Isolation between all antennas



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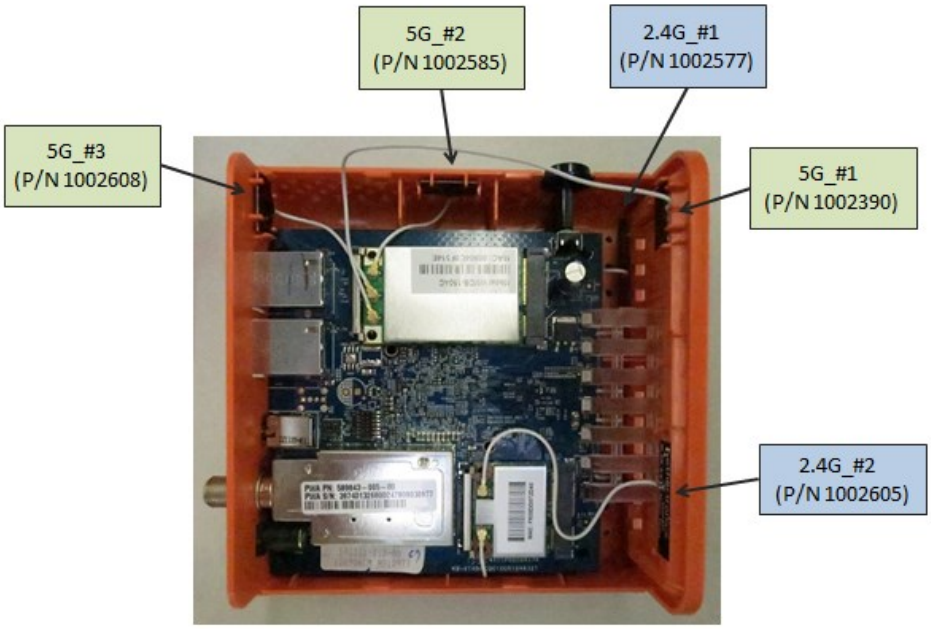
TEST SETUP



PEAK GAIN TABLE

	Peak Gain (over 2400-2500MHz) in dBi
2G1	1.660202504
2G2	3.355307003

COMPOSITE GAIN TABLE

2.4 GHz	
Antennas	Peak Gain (over 2400-2483.5MHz) in dBi
Chain A0	1.660202504
Chain A1	3.355307003
2Tx Composite	5.56