

Part No. 1004391

WLAN Dual Band FPC Custom Antenna with Cable

2.4 GHz, 5 GHz

Supports: Wi-Fi applications, Agriculture, Automotive, Bluetooth, Zigbee, WLAN, Smart Home, Healthcare, Digital Signage



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KEY BENEFITS

Stay-in-Tune

Ethertronics 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
- Telematics
- Tracking
- Healthcare
- M2M, Industrial devices
- Smart Grid
- OBD-II
- Cellular, Headsets, Tablets
- Gateway, Access Point
- Handheld

Ethertronics' custom WLAN antenna delivers on the key needs of device designers for higher functionality and performance in smaller/thinner design. This innovative custom antenna provides compelling advantages for a 2.4 GHz and 5.0 GHz enabled devices in a custom environment.

Electrical Specifications

Typical Performance in customer's unit on housing.

Frequency	2.400 – 2.485 GHz	5.150 – 5.825 GHz
Average Efficiency	57%	61%
VSWR Match	< 2.4:1	< 2.2:1
Feed Point Impedance	50 ohms unbalanced	
Polarization	Linear	
Power Handling	0.5 Watt CW	

Mechanical Specifications & Ordering Part Number

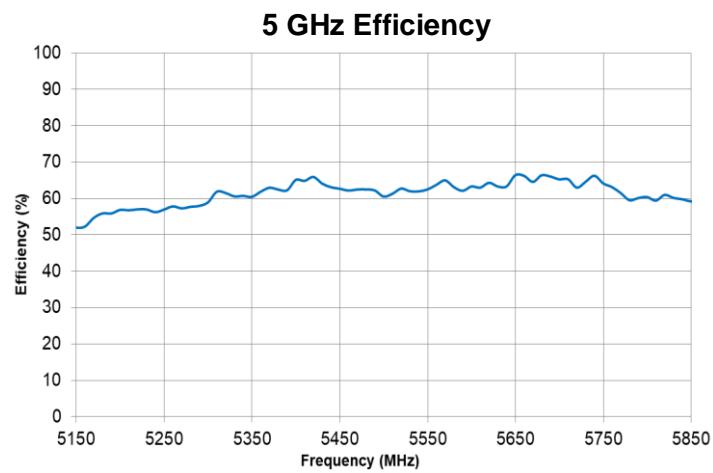
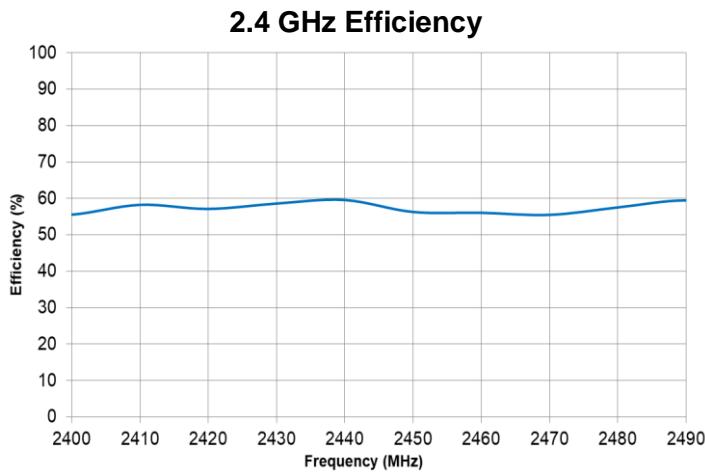
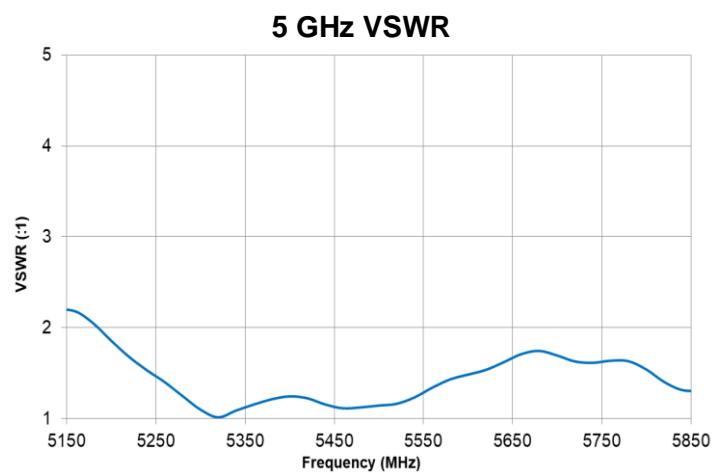
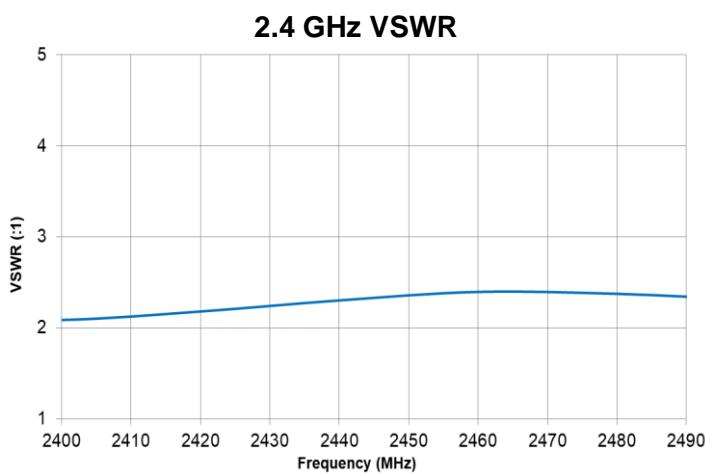
Ordering Part #	1004391
Dimensions (mm)	40.5 x 26.0 x 1.6
Weight (grams)	0.73
Cable/Connector (mm)	Length: 115 Diameter: 1.13 Color: Black Connector: U.FL compatible Ground clips on cable
Mounting	Adhesive on bottom side of antenna
Packaging	PE bags



2.4 / 5 GHz Custom Ethertronics' FPC Embedded Antenna Specifications
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

VSWR and Efficiency Plots

Typical Performance in customer's unit on housing.



Efficiency and Peak Gain Table

Typical Performance in customer's unit on housing.

Frequency (GHz)	Efficiency (%)	Peak Gain (dB)
2.400	56%	2.9
5.200	57%	2.0
5.300	59%	2.8
5.600	63%	2.0
5.800	60%	2.8

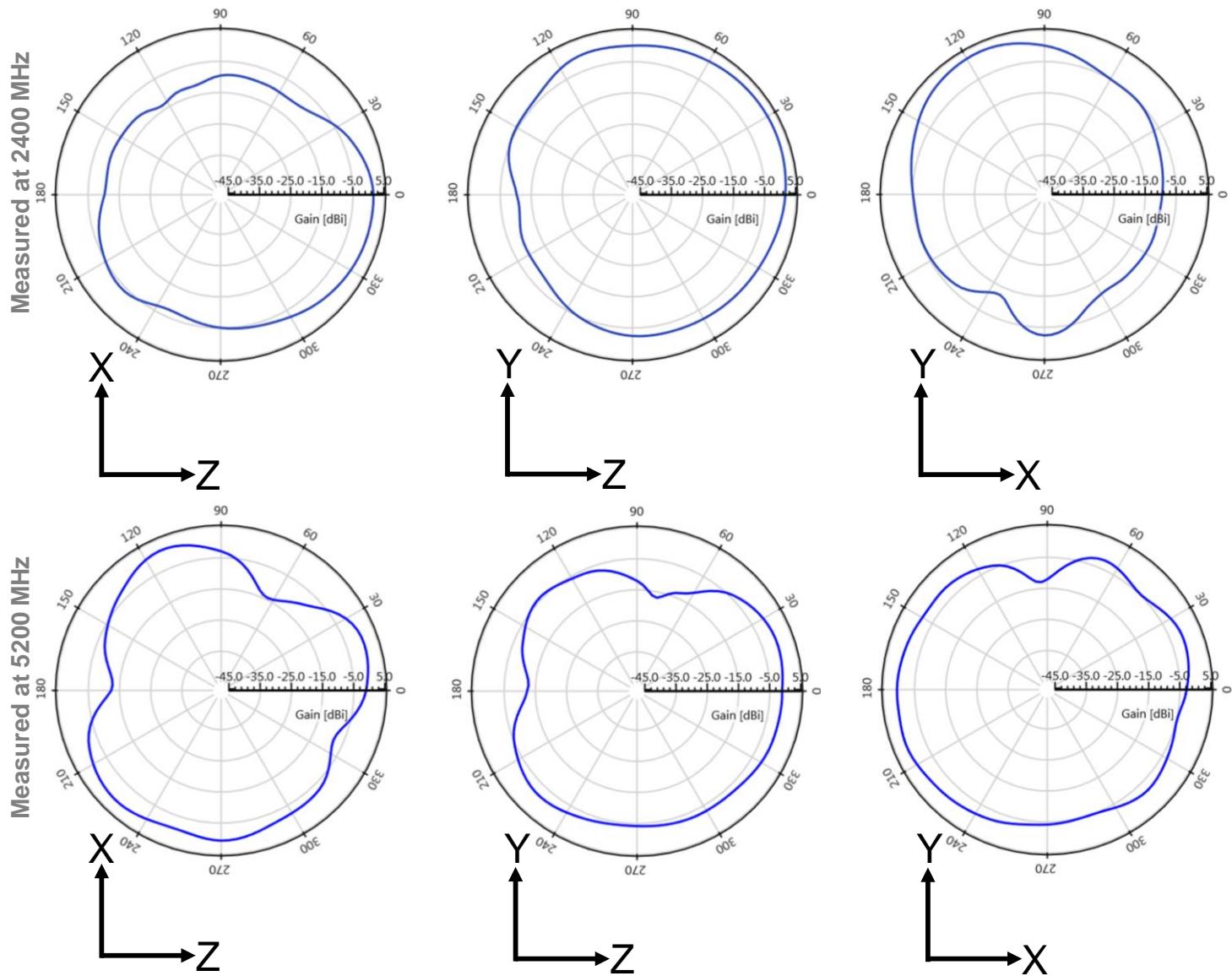
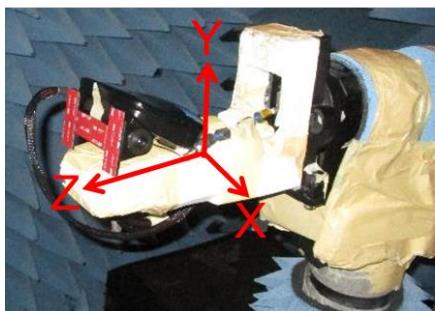


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Antenna Radiation Patterns

Typical Performance in customer's unit on housing.

Measured @ 2400, 5200 MHz



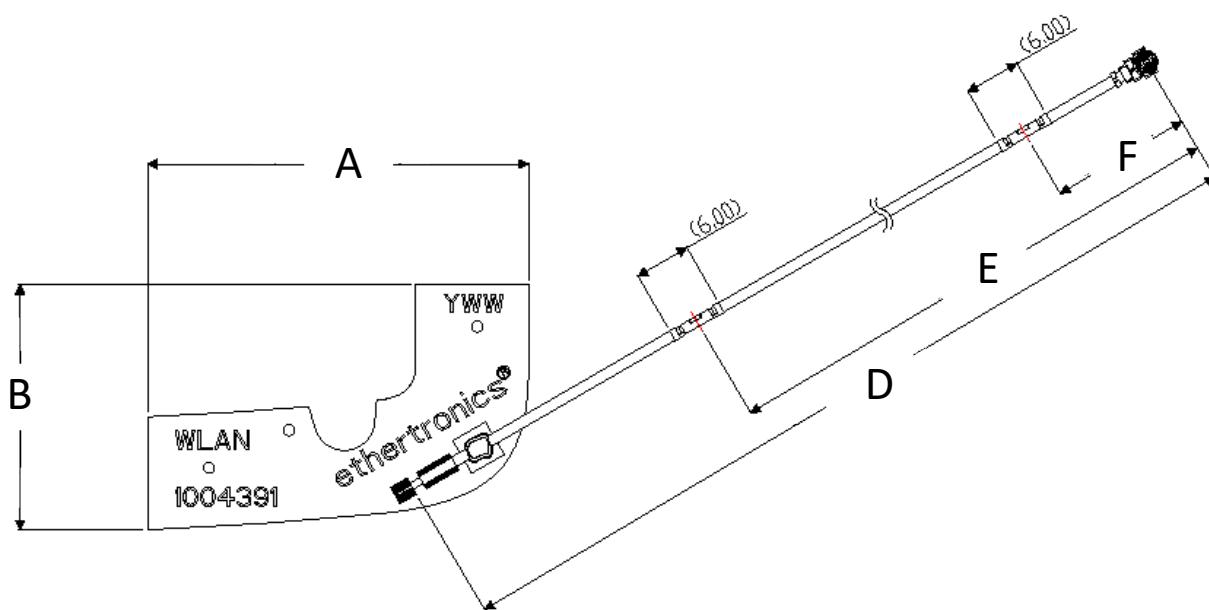


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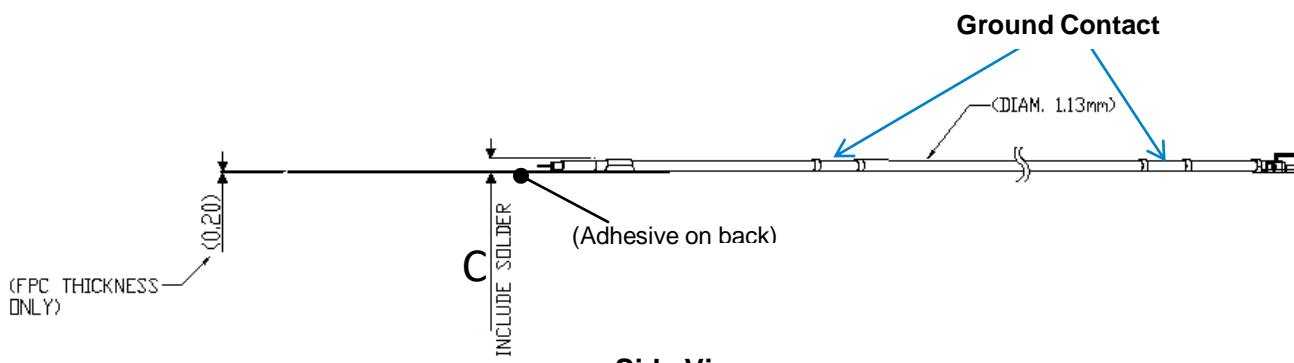
Mechanical Dimensions

Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Connector
1004391	40.53 ± 0.25	26.06 ± 0.20	1.6 (max)	115 ± 2.0	80.0 ± 1.0	15.0 ± 1.0	U.FL compatible



Top View



Side View