

Part No. 1005194
UWB PCB Antenna with SMA Connector
6.0 – 8.5 GHz
Supports: Smart Home, Agriculture, Tracking, Radar, Automotive, Healthcare, Digital Signage, Telematics



Ethertronics' 1005194 is a versatile off-board UWB PCB antenna optimized for applications spanning 6.0 – 8.5 GHz where off-board implementation is advantageous and necessary. The 1005194 antenna incorporates a rigid mounting structure through an SMA connection allowing for ease of assembly to any device.

Electrical Specifications

Typical Performance using antenna with SMA connector in Free-space.

UWB PCB Embedded Antenna
6000 – 8500 MHz

Frequency	6.0 – 8.5 GHz
Peak Gain	6.1 dBi
Average Efficiency	85%
VSWR Match	2.0 :1 max
Feed Point Impedance	50 ohms unbalanced
Polarization	Linear
Operation Temperature	-40 to +85 °C
Power Handling	10 Watt

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
- Radar
- Gateway, Access Point
- Handheld
- Telematics
- Tracking
- Healthcare
- M2M, Industrial devices
- Smart Grid
- OBD-II

Mechanical Specifications & Ordering Part Number

Ordering Part #	1005194
Dimensions (mm)	20.6 x 18.6 x 0.8
Weight (grams)	2.7 ~ 4.3
Connector (mm)	SMA compatible connector
Mounting	Screw Mount
Storage Temperature (°C)	-40 to +85
Packaging	PE bags

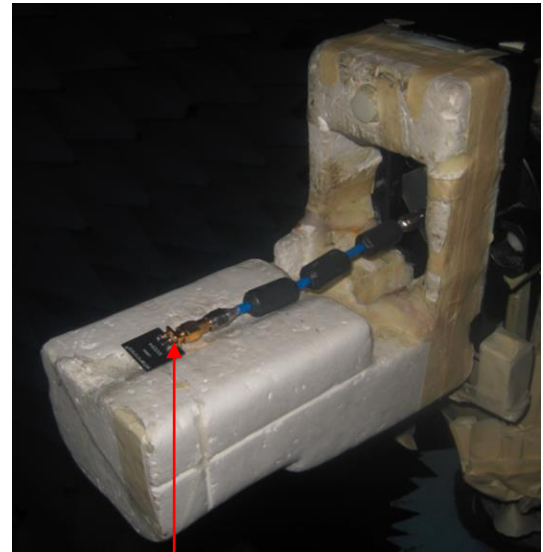
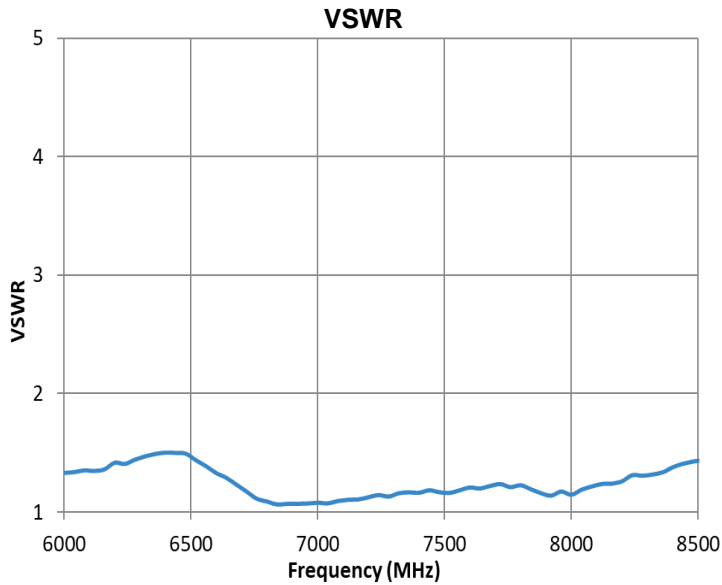
*Additional variations available with different connectors.



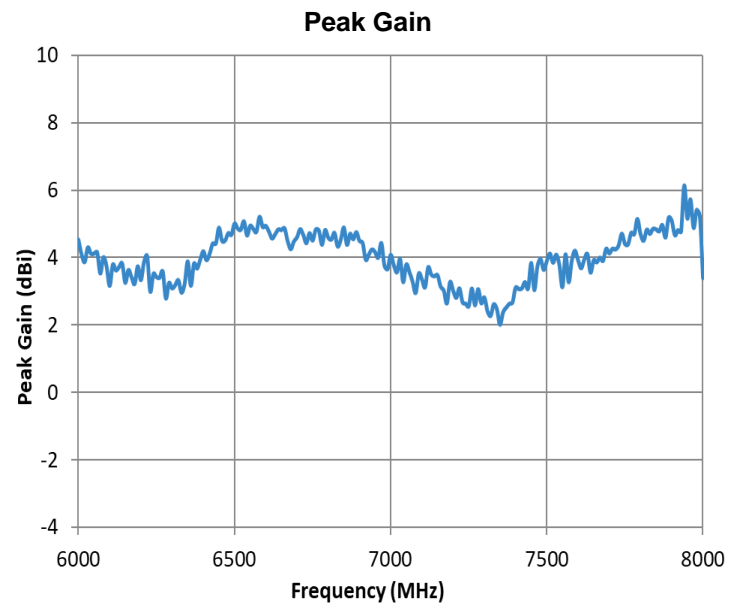
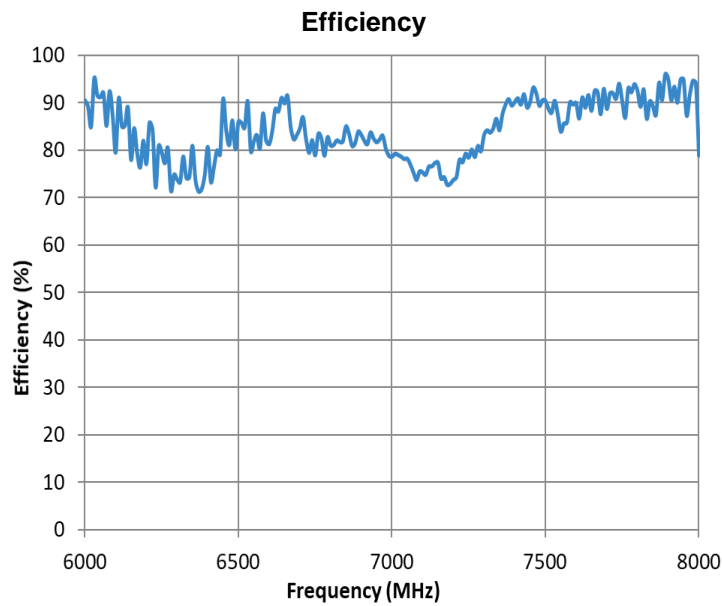
UWB PCB antenna with SMA connector Specifications
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

Typical VSWR, Efficiency and Peak Gain plots

Typical Performance using antenna with SMA connector in Free-space.



1005194





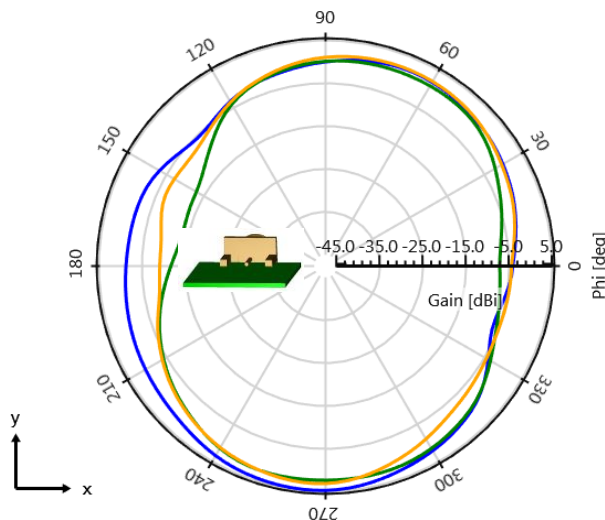
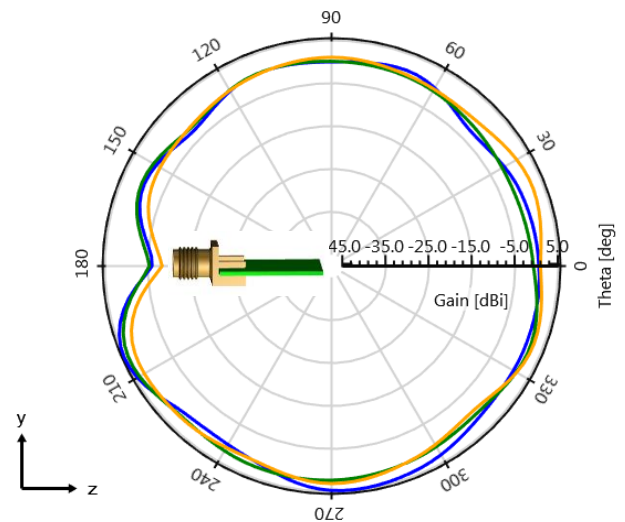
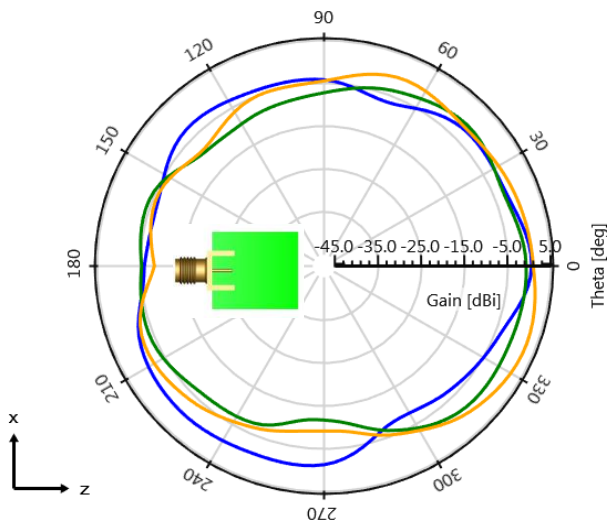
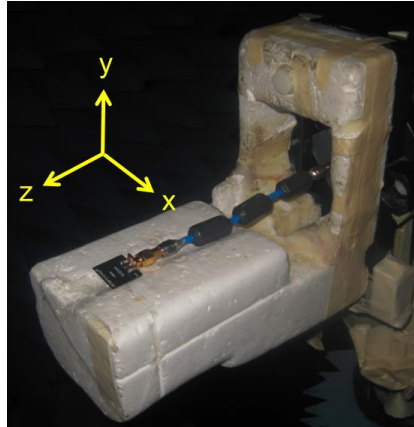
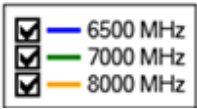
UWB PCB antenna with SMA connector Specifications

Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

Radiation Patterns Plots

Typical Performance using antenna with SMA connector in Free-space.

Typical Performance @ 6500 MHz, 7000 MHz, 8000 MHz





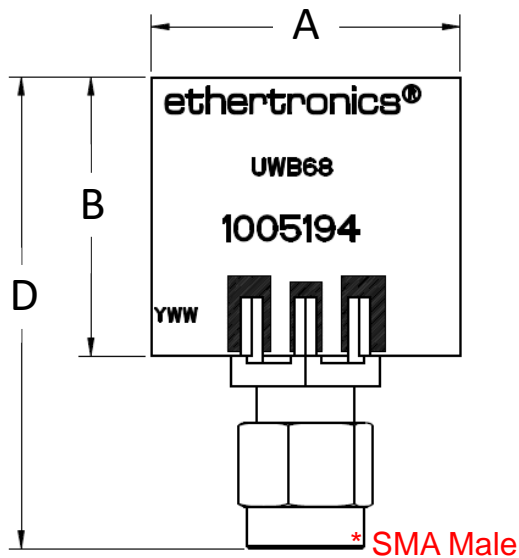
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Mechanical Dimensions

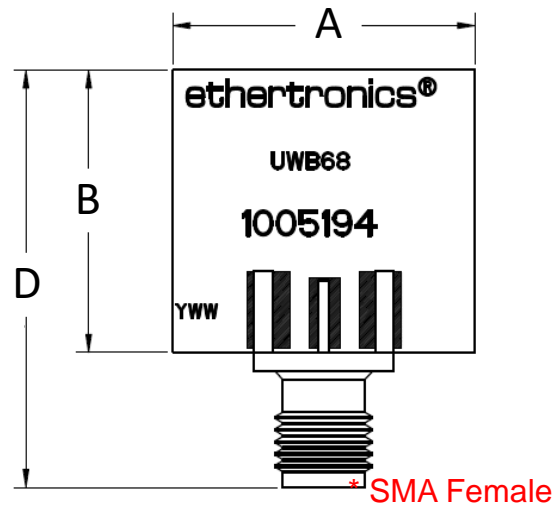
Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	D (mm)	*Connector Type
1005194-A01	20.6 ± 0.2	18.6 ± 0.2	0.8	31.5	SMA Male
1005194-B02	20.6 ± 0.2	18.6 ± 0.2	0.8	27.5	SMA Female

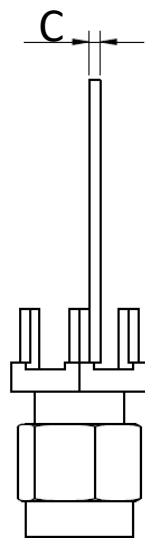
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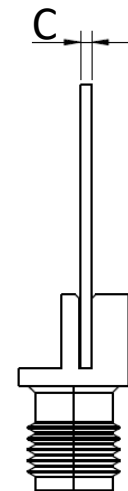
Top View



Top View



Side View



Side View