



DATASHEET Part No. 1005194 Product: UWB PCB Antenna with SMA Connector

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



UWB PCB Embedded Antenna

6000 - 8500 MHz

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

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.

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			

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.

1/7/2020

Proprietary

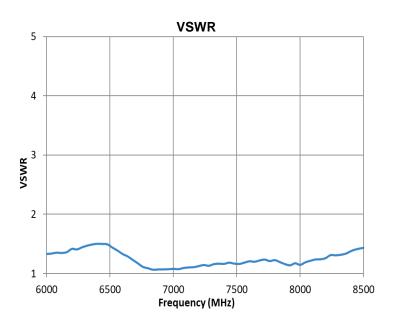
www.ethertronics.com

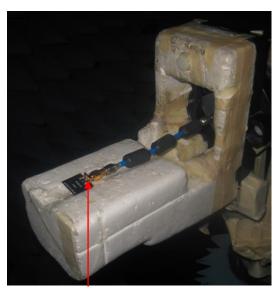


UWB PCB antenna with SMA connector Specifications Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

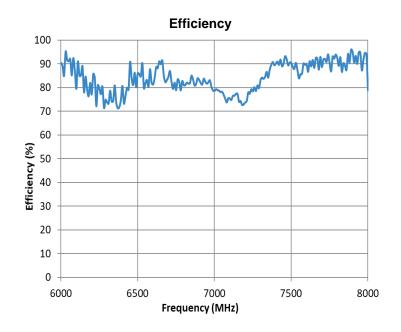
Typical VSWR, Efficiency and Peak Gain plots

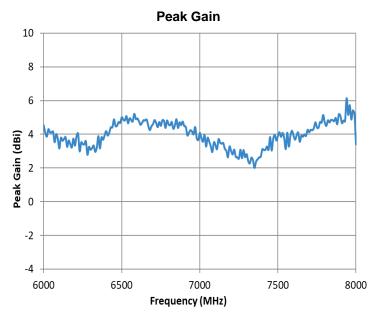
Typical Performance using antenna with SMA connector in Free-space.





1005194





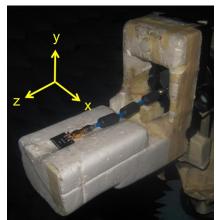


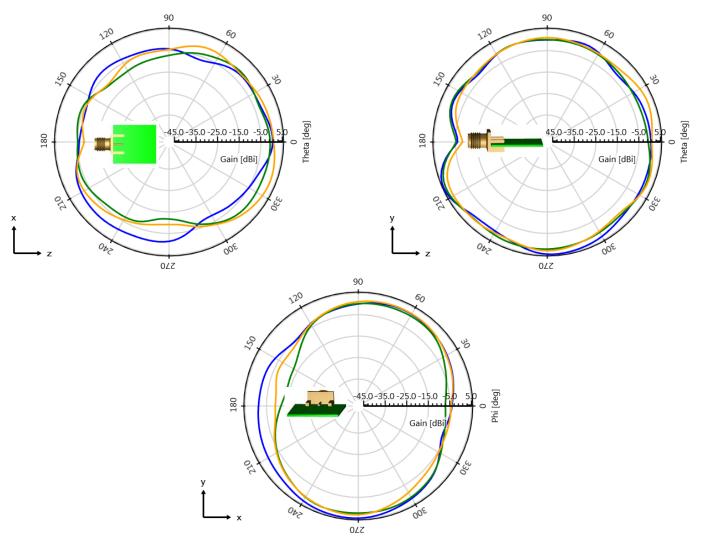
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Radiation Patterns Plots

Typical Performance using antenna with SMA connector in Free-space. Typical Performance @ 6500, 7000, 8000 MHZ









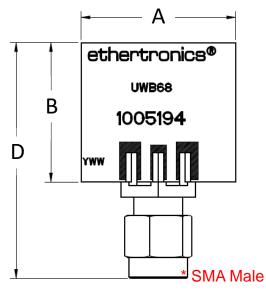
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Mechanical Dimensions

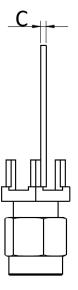
Typical antenna dimensions (mm)

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

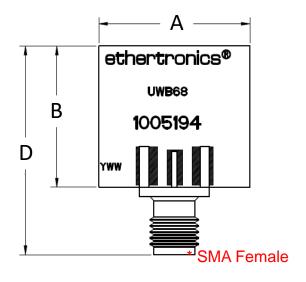
*Additional variations available with different connectors.



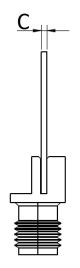




Side View



Top View



Side View

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Kyocera AVX: <u>1005194-B02</u> <u>1005194-A01</u>