



Part No. 1005193 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

Ethertronics' 1005193 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 1005193 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	6.0 dBi			
Average Efficiency	80%			
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

6000 - 8500 MHz

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
 Healthcare M2M, Industrial devices
 Smart Grid

OBD-II

- HandheldTelematics
- Tracking

Mechanical Specifications & Ordering Part Number

Ordering Part #	1005193				
Dimensions (mm)	18.6 x 20.6 x 0.8				
Weight (grams)	2.7 ~ 4.3				
Connector (mm)	SMA compatible connector				
Mounting	Screw Mount				
Storage Temperature (°C)	-/IU to ±x5				
Packaging	PE bags				

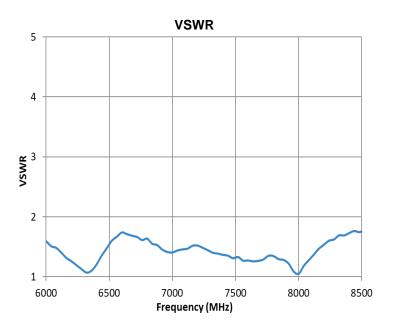
^{*}Additional variations available with different connectors.

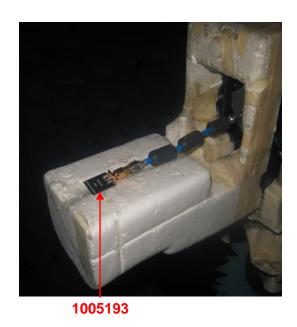


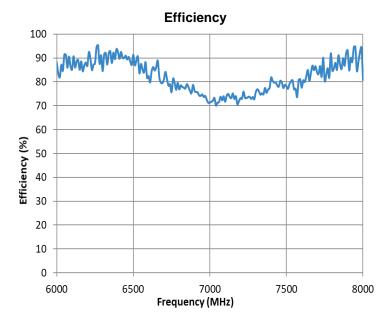
UWB PCB antenna with SMA connector Specifications
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

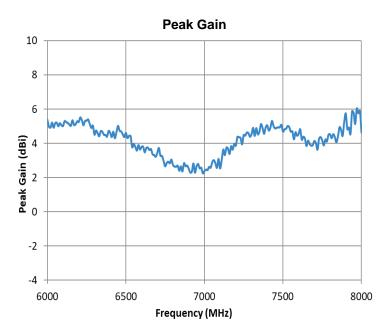
Typical VSWR, Efficiency and Peak Gain plots

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









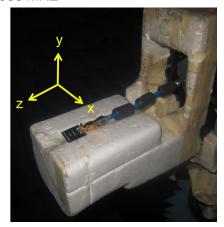


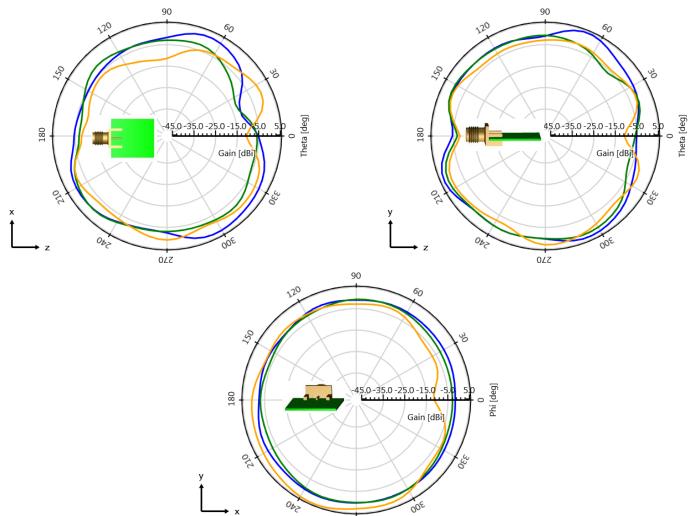
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Radiation Patterns Plots

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







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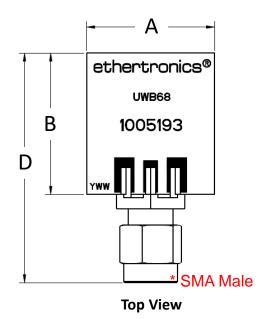
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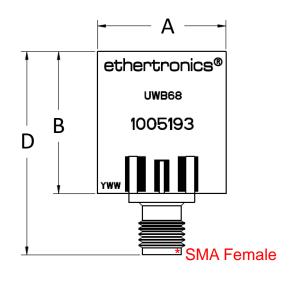
Mechanical Dimensions

Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	D (mm)	*Connector Type
1005193-A01	18.6 ± 0.2	20.6 ± 0.2	0.8	33.46	SMA Male
1005193-B02	18.6 ± 0.2	20.6 ± 0.2	0.8	29.49	SMA Female

^{*}Additional variations available with different connectors.





Top View

