

Part No. 1005190F0

UWB FPC Embedded Antenna

6.5 – 8.5 GHz

Supports: Smart Home, Agriculture, Tracking, Radar, Automotive, Healthcare, Digital Signage, Telematics



Ethertronics' 1005190F0 is a versatile off-board UWB FPC antenna optimized for applications spanning 6.5 – 8.5 GHz where off-board implementation is advantageous and necessary. 1005190F0 is ideal for systems requiring a ground plane independent antenna allowing maximum placement flexibility.

Custom cable and connector options are available. Please contact us for more information.

Electrical Specifications

Typical Performance using 100 mm cable tested on PC-ABS

Frequency	6.5 – 8.5 GHz
Peak Gain	5.3 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

UWB FPC Embedded Antenna

6500 – 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 design
- Radar
- Gateway, Access Point
- Handheld
- Telematics
- Tracking
- Healthcare
- M2M, Industrial devices
- Smart Grid
- OBD-II

Mechanical Specifications & Ordering Part Number

Ordering Part #	1005190F0
Dimensions (mm)	18.6 x 15.6 x 0.2
Weight (grams)	0.77
Cable/ Connector (mm)	Length: 100, Diameter: 1.37, Color: Black; MHF compatible connector
Mounting	Adhesive on bottom side of antenna
Storage Temperature (°C)	-40 to +85
Packaging	PE bags

*Additional variations available with different cable lengths, colors and connectors.

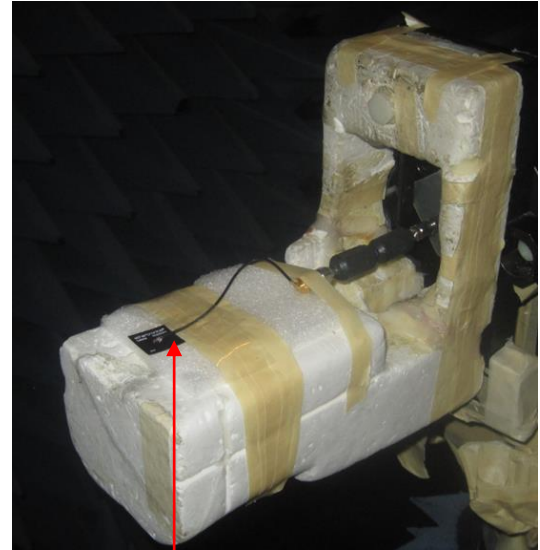
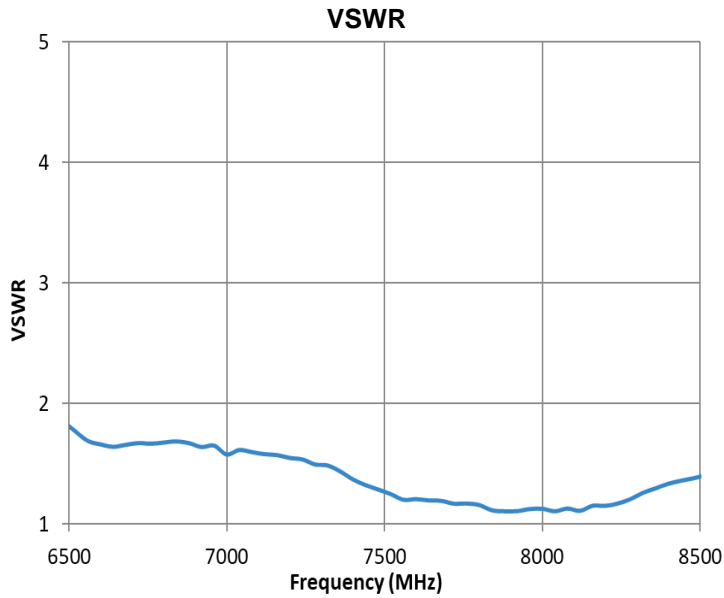


UWB FPC Embedded Antenna Specifications

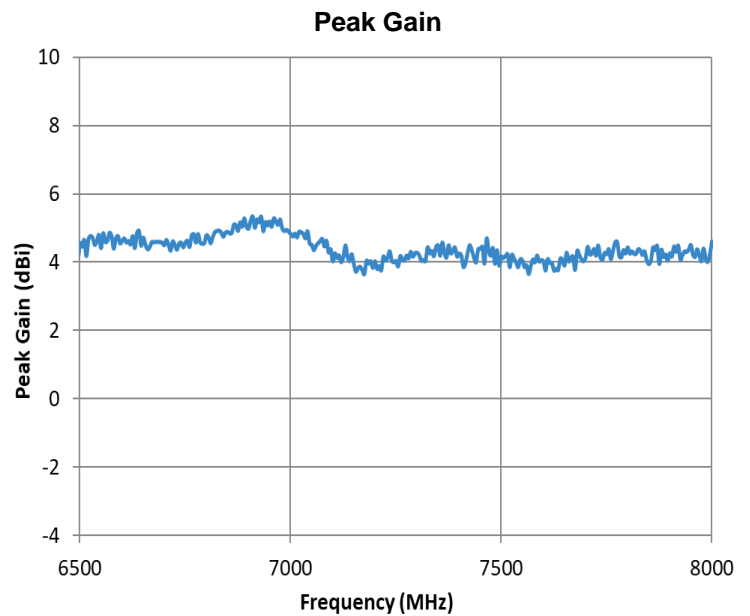
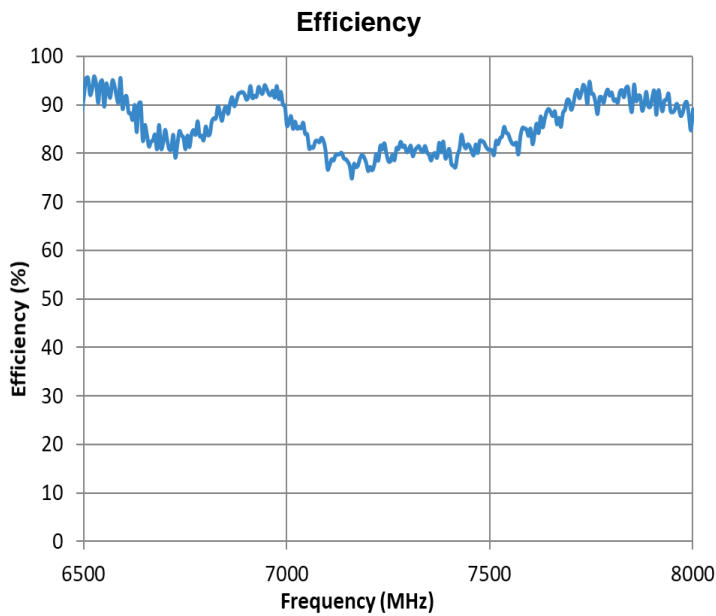
Ethertronics produces a wide variety of standard and custom antennas to meet user needs.

Typical VSWR, Efficiency and Peak Gain plots

Typical Performance using 100 mm cable tested on PC-ABS



1005190F0





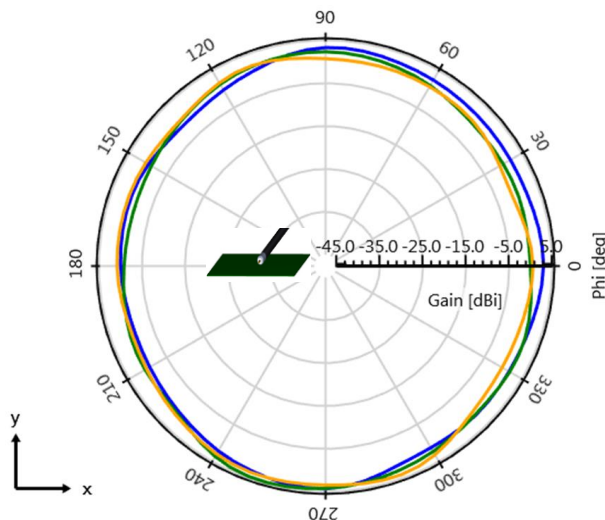
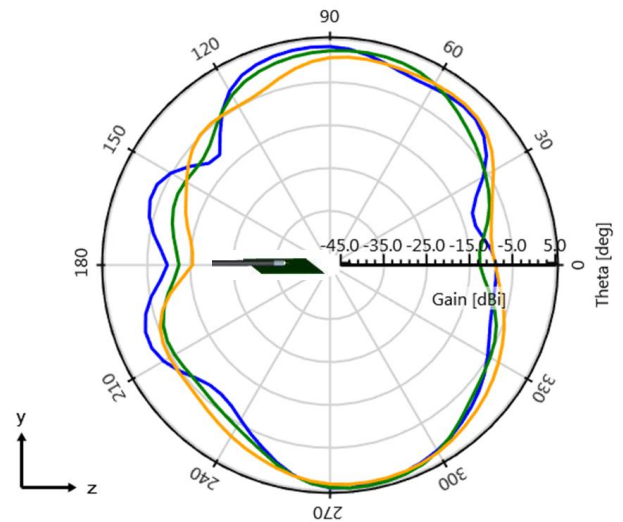
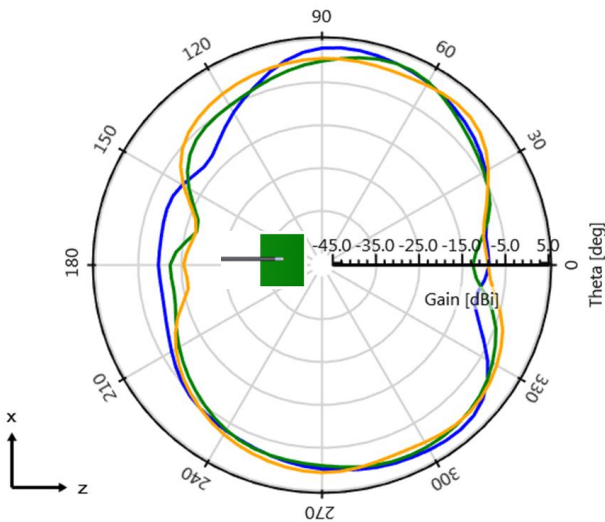
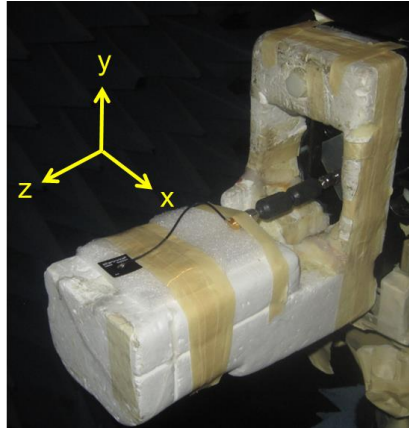
UWB FPC Embedded Antenna Specifications

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Radiation Patterns Plots

Typical Performance using 100 mm cable tested on PC-ABS

Typical Performance @ 6500 MHz, 7000 MHz, 8000 MHz





UWB FPC Embedded Antenna Specifications

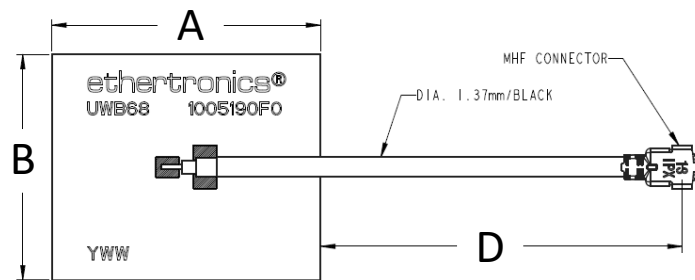
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Mechanical Dimensions (MHF Connector)

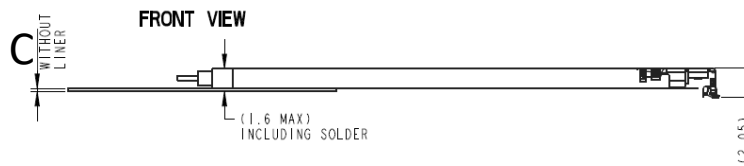
Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	*D (mm)	Connector Type
1005190F0-AA70L0025	18.6	15.6	0.2	25 ± 3.0	MHF
1005190F0-AA70L0050	18.6	15.6	0.2	50 ± 3.0	MHF
1005190F0-AA70L0075	18.6	15.6 <td>0.2</td> <td>75 ± 3.0</td> <td>MHF</td>	0.2	75 ± 3.0	MHF
1005190F0-AA70L0100	18.6	15.6	0.2	100 ± 3.0	MHF
1005190F0-AA70L0150	18.6	15.6	0.2	150 ± 4.0	MHF
1005190F0-AA70L0200	18.6	15.6	0.2	200 ± 4.0	MHF

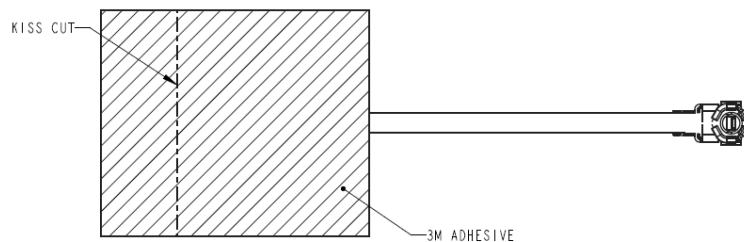
*Additional variations available with different cable lengths, colors and connectors.



Top View



Side View



Bottom View



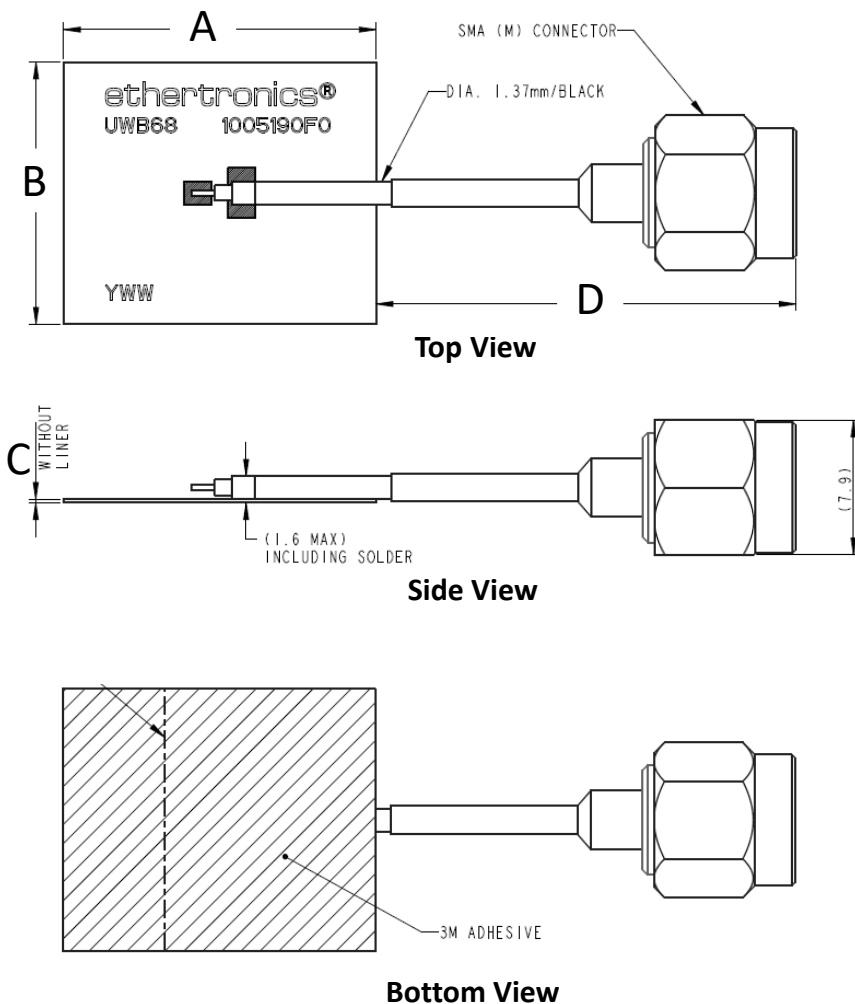
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Mechanical Dimensions (SMA Male Connector)

Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	*D (mm)	Connector Type
1005190F0-AS70L0025	18.6	15.6	0.2	25 ± 3.0	SMA Male
1005190F0-AS70L0050	18.6	15.6	0.2	50 ± 3.0	SMA Male
1005190F0-AS70L0075	18.6	15.6	0.2	75 ± 3.0	SMA Male
1005190F0-AS70L0100	18.6	15.6	0.2	100 ± 3.0	SMA Male
1005190F0-AS70L0150	18.6	15.6	0.2	150 ± 4.0	SMA Male
1005190F0-AS70L0200	18.6	15.6	0.2	200 ± 4.0	SMA Male

*Additional variations available with different cable lengths, colors and connectors.



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