

ULTRA-WIDEBAND DIRECTIONAL ANTENNA

700 MHz TO 8 GHz

UWB700-D

KEY FEATURES

- Extremely wide bandwidth and consistent directional radiation patterns with end-fire gain up to 9 dBi
- VSWR typically below 2:1
- Very thin, lightweight, and compact for a broadband directional antenna operating down to 700 MHz
- Professionally designed and hand-tested by engineers in the United States

APPLICATIONS

- Measurement, test, and experimentation
- Wide bandwidth antenna for software-defined radios
- Cellular (2G, 3G, 4G LTE) and WiFi (2.4 GHz and 5.8 GHz)
- Electromagnetic surveillance and direction finding
- University research projects



UWB700-D

PRODUCT OVERVIEW

The UWB700-D is an ultra-wideband directional antenna that operates from 700 MHz to 8 GHz. This high-performance antenna was professionally designed to achieve an extremely wide bandwidth and very consistent radiation patterns in a compact and slim form-factor. Each antenna has been inspected and hand-tested by engineers in the USA to ensure performance characteristics. This versatile antenna has numerous applications including laboratory test and measurement, research and development, and experimentation with software defined radios.

PERFORMANCE DATA

Parameter	Frequency	Min.	Typ.	Max.	Unit	
VSWR	700 MHz – 1.2 GHz	1.9	2.3	3.0	—	
	1.2 GHz – 3.9 GHz	1.1	1.4	2.0		
	3.9 GHz – 8 GHz	1.4	1.9	2.6		
Gain	700 MHz – 8 GHz	3.0	8.0	8.7	dBi	
HPBW	700 MHz – 8 GHz	E-Plane	34	50	84	deg.
		H-Plane	31	60	153	
Input Power	700 MHz – 8 GHz	—	—	10	dBm	
Impedance	—	50			Ω	
Connector	—	SMA (female)			—	

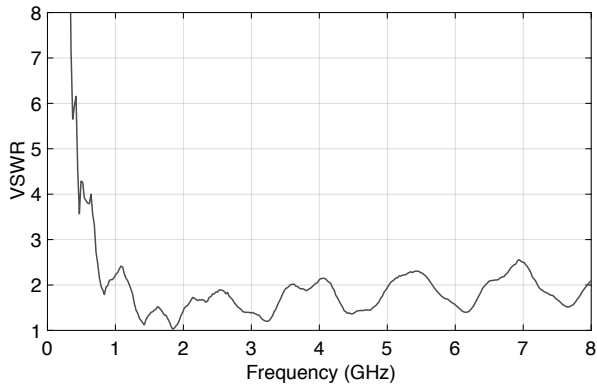
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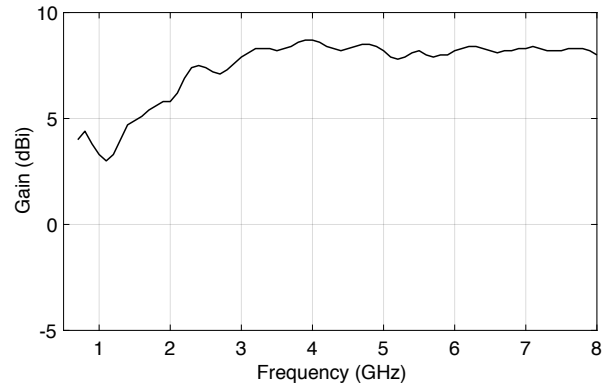
UWB700-D

PERFORMANCE DATA (CONT.)

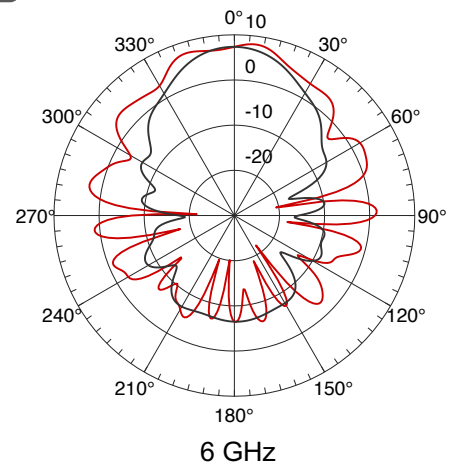
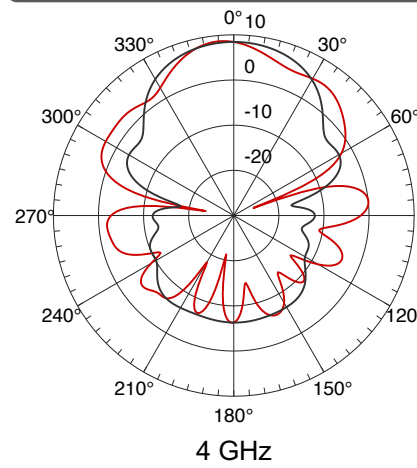
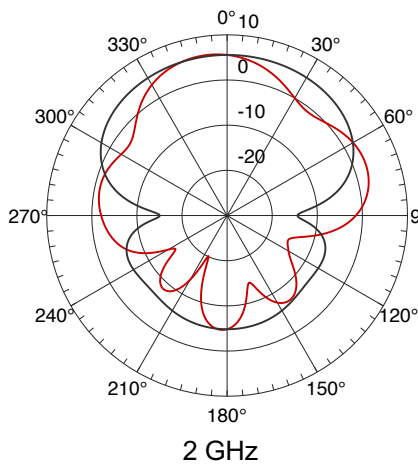
UWB700-D Voltage Standing Wave Ratio



UWB700-D Gain

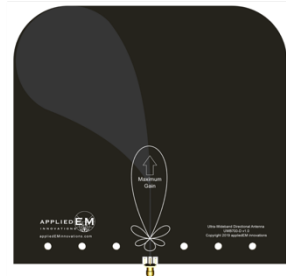
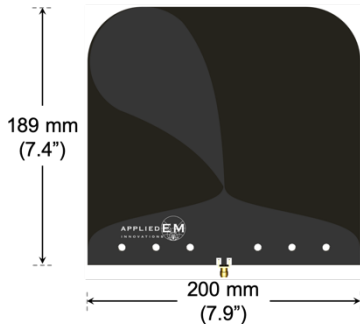


— E-Plane — H-Plane



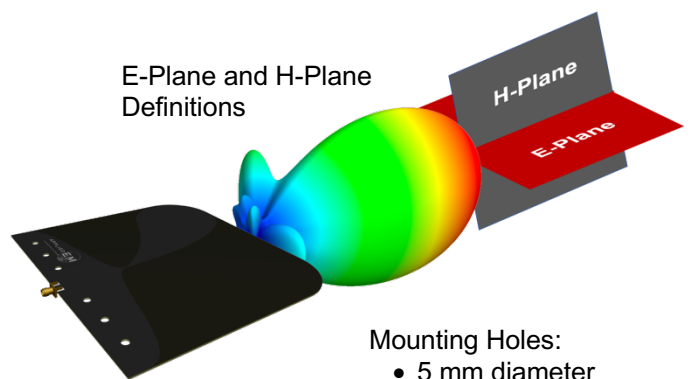
Front View

Back View



1.2 mm thick (6.35 mm thick including SMA connector)

E-Plane and H-Plane Definitions



Mounting Holes:

- 5 mm diameter
- 25 mm spacing