

## ULTRA-WIDEBAND DIRECTIONAL ANTENNA

1.45 GHz TO 8.0 GHz

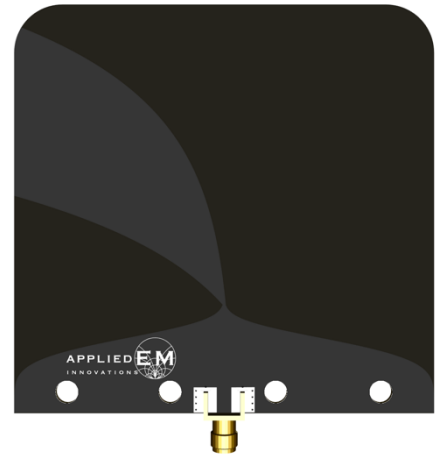
UWB1400-D

### KEY FEATURES

- Very wide bandwidth from 1.45 GHz to 8 GHz
- Directional radiation patterns with end-fire gain up to 8.5 dBi
- VSWR typically below 2.5:1
- Very thin, lightweight, and compact
- 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, 5G) and WiFi (2.4 GHz and 5.8 GHz)
- Electromagnetic surveillance and direction finding
- University research projects



UWB1400-D

### PRODUCT OVERVIEW

The UWB1400-D is an ultra-wideband directional antenna that operates from 1.45 GHz to 8 GHz. This high-performance antenna was professionally designed to achieve a very wide bandwidth and 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	1.45 GHz – 8 GHz	1.2	2.0	3.1	—	
Gain	1.45 GHz – 8 GHz	3.4	7.5	8.5	dBi	
HPBW	E-Plane H-Plane	1.45 GHz – 8 GHz	33	45	83	deg.
		42	75	169		
Input Power	1.45 GHz – 8 GHz	—	—	10	dBm	
Impedance	—	50			$\Omega$	
Connector	—	SMA (female)			—	

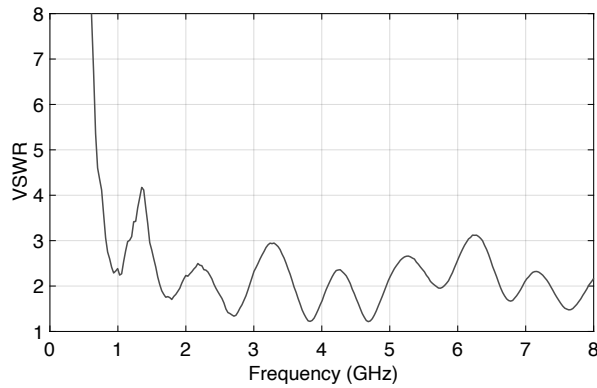
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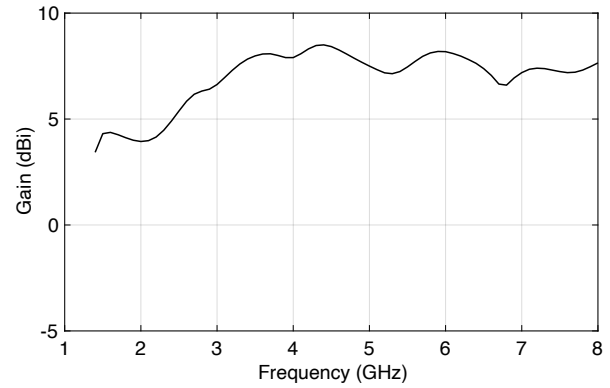
UWB1400-D

**PERFORMANCE DATA (CONT.)**

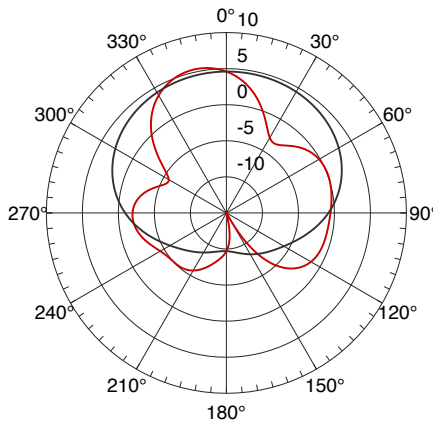
UWB1400-D Voltage Standing Wave Ratio



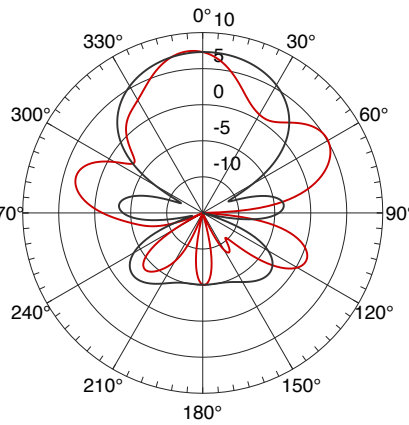
UWB1400-D Gain



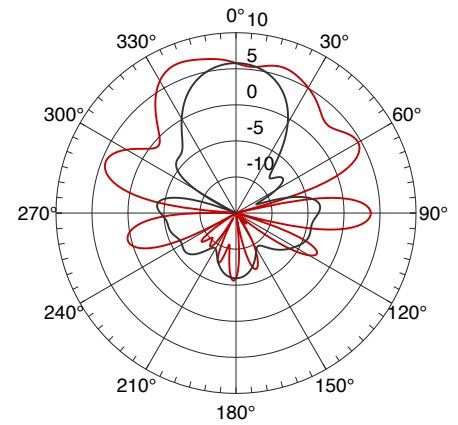
— E-Plane    — H-Plane



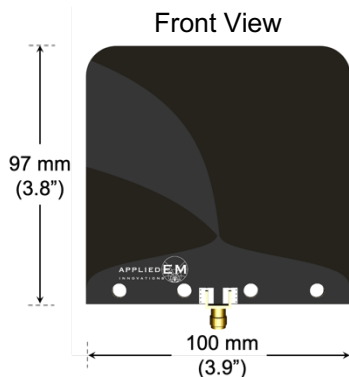
2.5 GHz



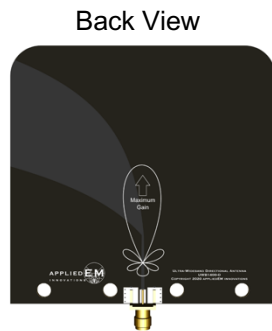
5.0 GHz



7.5 GHz

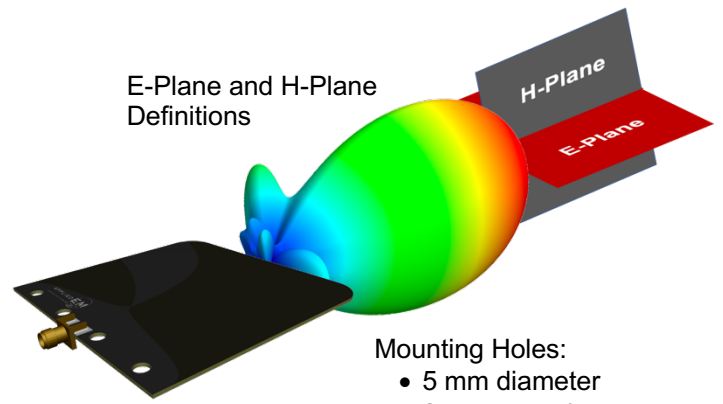


Front View



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