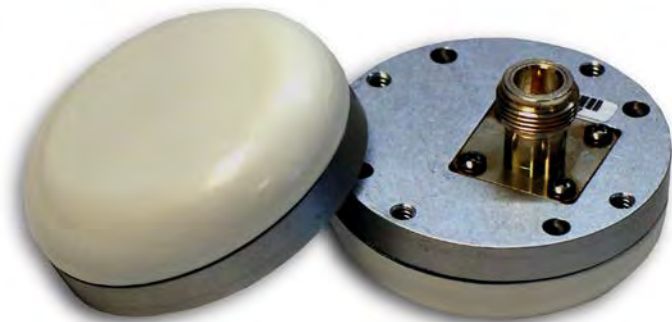


# L1L2-2GA

## GPS Active Antenna

### Features

- ❖ L1/L2 Dual Band
- ❖ Design for Military & Civilian Aviation
- ❖ Multiple Connector Options



### Description

The L1L2-2GA is a dual band active L1/L2 GPS antenna that is ideally suited for any military or civilian aviation application. The L1L2-2GA is available with various common RF connector options in order to meet your specific needs.

Please call (719) 561-9520 or visit our website ([www.gpssource.com](http://www.gpssource.com)) for further information on how to order or details on product options.

Electrical Specifications, Operating Temperature -54<sup>0</sup> to 71<sup>0</sup> C

Parameter		Conditions	Min	Typ	Max	Units
Frequency Range: (Passband)	L1	Ant – Output = 50Ω	1560.42	1575.42	1590.42	MHz
	L2	Ant – Output = 50Ω	1212.6	1227.6	1242.6	MHz
Out Imped.				50		Ω
Element Gain	L1	Output = 50Ω, 4 ft G.P.	3.0	3.4	4.0	dBiC
	L2	Output = 50Ω, 4 ft G.P.	3.0	6.7	7.0	
LNA Gain	L1	Output = 50Ω	31.5	33.0	34.5	dBm
	L2	Output = 50Ω	31.5	33.0	34.5	
Output SWR		Output = 50Ω			2.0:1	-
LNA Current		Output = 50Ω, Voltage=5V		44	50	mA
LNA OP1dB Compression				13		dBm
LNA OIP3				25		dBm
Noise Figure		Output = 50Ω, Voltage=5V			3	dB
Rejection @ +/- 50 MHz			>12dB			
@ +/- 100 MHz			>42dB			
Polarization			Right Hand Circular			
Axial Ratio @ Peak			2dB max			
Beam width			115° +/-5° at -3dB from peak			
Altitude			50,000ft			
Lightning Protection			DC ground on the antenna element			

**Environmental:**

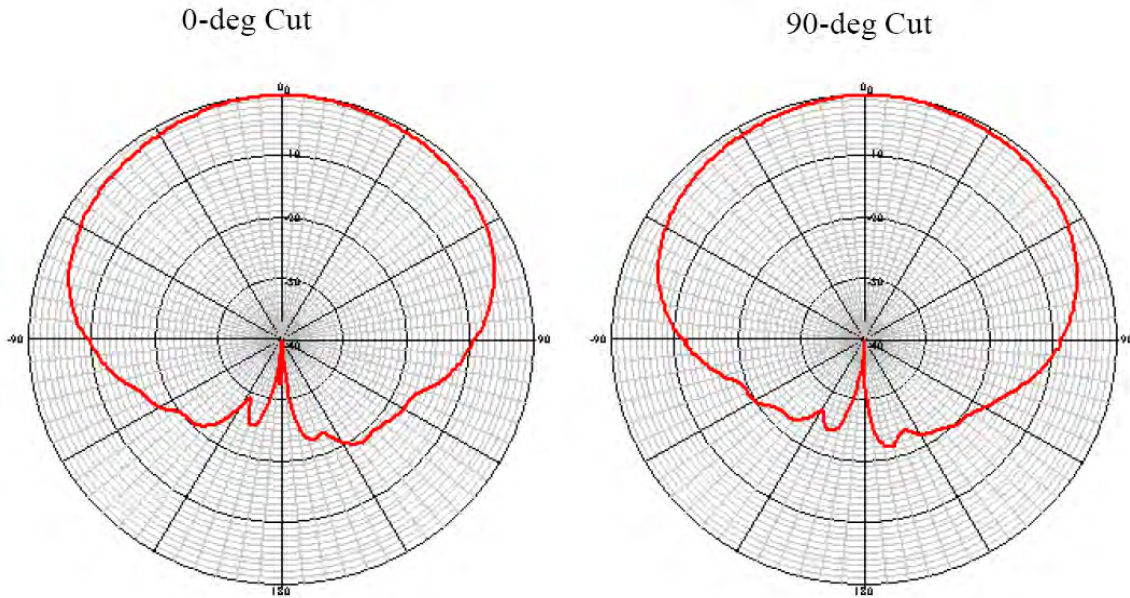
The L1L2-2GA has been designed to meet the following MIL-STD-810 requirements:

- Mechanical Vibration: 810G, Mtd 514.6
- Functional Shock: 810G, Mtd 516.6
- Crash Hazard: 810G, Mtd 516.6
- Temp & Altitude: 810D, Mtd 520.0, Proc. III
- Temperature Shock: 810D, Mtd 503.2, Proc. I
- Humidity: 810D, Mtd 507.2, Proc. III
- Salt Fog: 810D, Mtd 509.2, Proc. I
- Fungus: 810D, Mtd 508.3
- Sand & Dust: 810D, Mtd 510.2, Proc. I
- Explosive Atmosphere: 810D, Mtd 511.2, Proc. I



Performance Data:

Far-Field Plots - No Ground Plane, L1 Center Frequency



Far-Field Plots - No Ground Plane, L2 Center Frequency

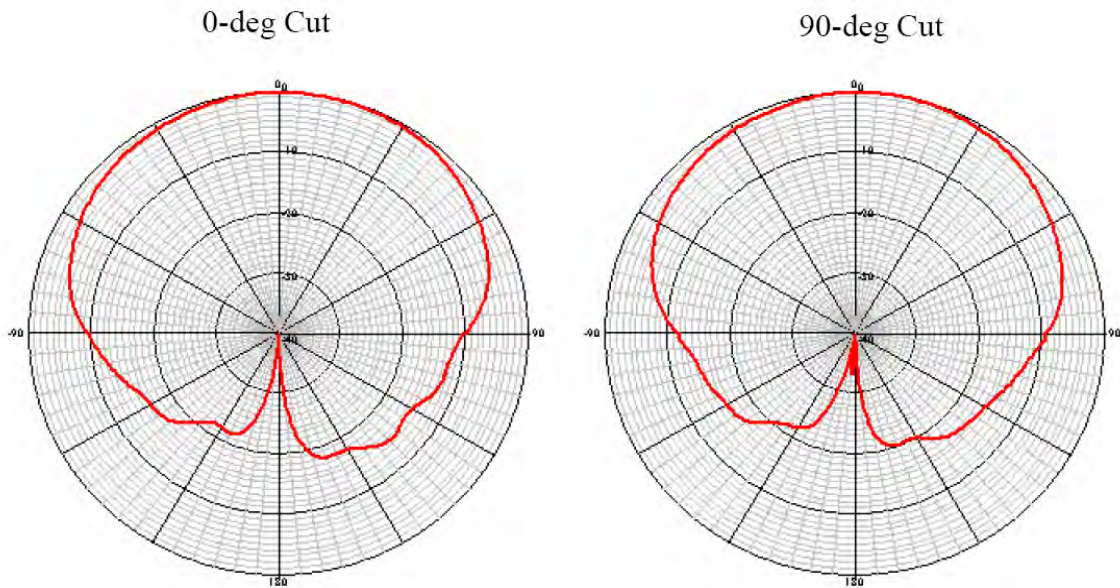


Figure 1. Antenna Far Field Pattern Data

Mechanical:

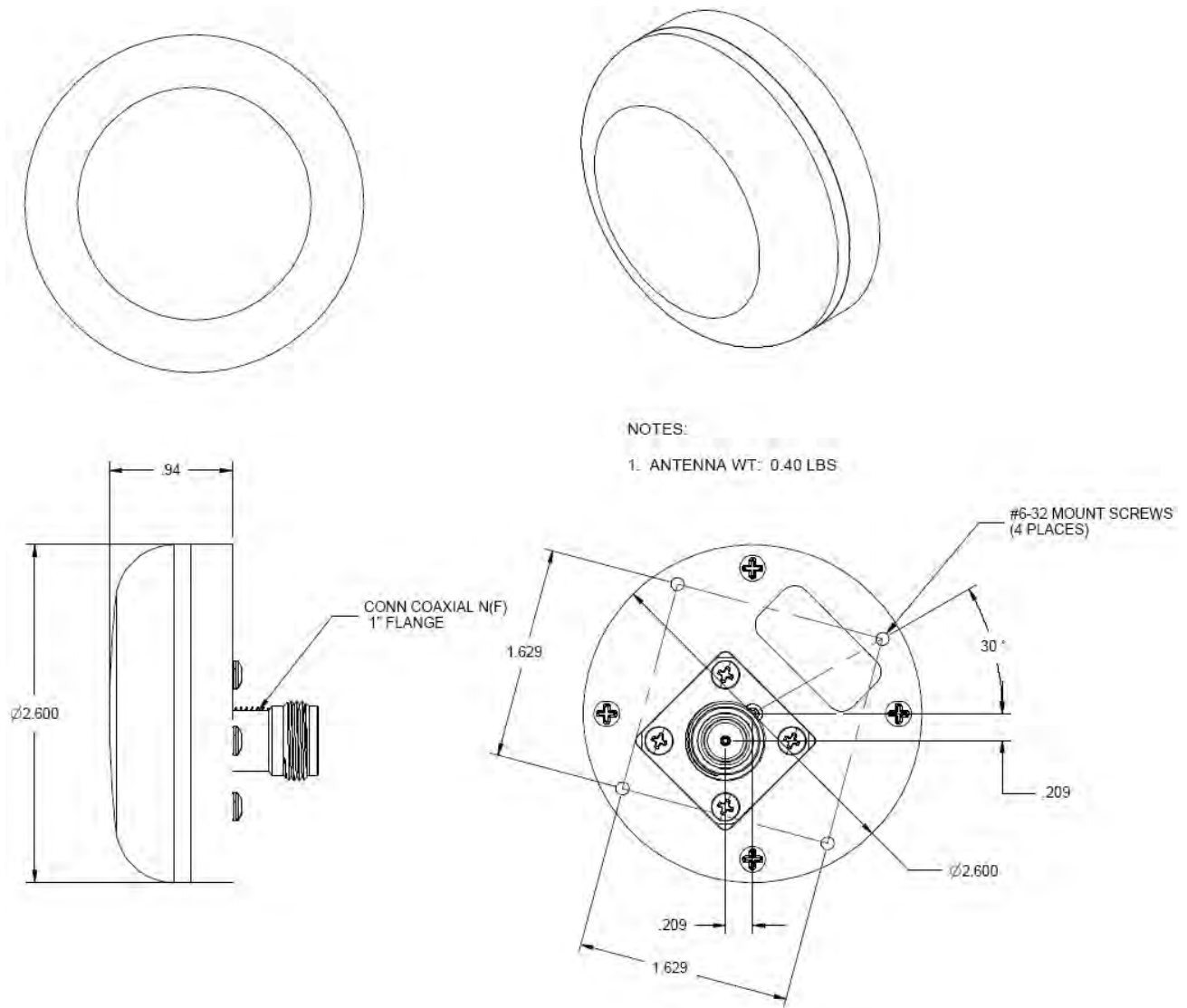


Figure 2. Antenna Mechanical Data

**Available Options:**

<b>RF Connector Options:</b>	
<b>Connector Options</b>	<b>Connector Type</b>
	N (Male & Female)
	SMA (Male & Female)
	TNC (Female)

**Part Number:**

L1L2-2GA - X - NF

**Product:**  
Standard L1L2-2GA GPS  
Active Antenna

**Color Options:**  
1 – White, Gloss  
3 – Olive Green, Matte  
2 – Black, Matte  
4 – Tan, Matte

**Connector Options:**  
NM – N, Male  
NF – N, Female  
SM – SMA, Male  
SF – SMA, Female  
TF – TNC, Female

For help in creating the part number to meet your exact needs, contact us at [Sales@gpssource.com](mailto:Sales@gpssource.com) or visit our website at [www.gpssource.com](http://www.gpssource.com)