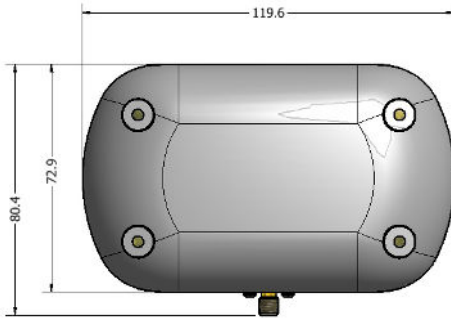




GPS-LB12GL-MAG



## GPS L1/L2, L Band & GLONASS G1 Active, High Performance Magnetic Mount Antenna

The GPS-LB12GL-MAG is designed to meet DO-160 standards for airborne equipment. The Arinc 743 form factor is robust with a hermetic seal for long lasting, trouble free deployment and durability.

### Key Applications

- Military Vehicle Tracking & Asset Tracking
- Precision Agriculture
- Differential Correction

### Antenna Element Electrical Specifications

Frequency Bands (+/-10MHz)	Nominal Impedance	VSWR	Polarization	Grounding Protection	RF Input
1575.42MHz (GPS L1)	50 ohms	< 2.0:1	Right hand circular	DC grounded	SMA female
1227.60MHz (GPS L2)					
1525-1610MHz (L-Band)					
1602.00MHz (GLONASS)					

Frequency (typical values)*	Gain @ 10° Elev.	Gain @ 90° Elev.	Axial Ratio @ 30° Elev.	Axial Ratio @ 45° Elev.	Axial Ratio @ 90° Elev.
1575.42MHz (GPS L1)	-5 dBic	2 dBic	≤ 11 dB	≤ 9 dB	≤ 4 dB
1227.60MHz (GPS L2)	-6 dBic	3 dBic	≤ 7 dB	≤ 6 dB	≤ 2 dB
1525-1610MHz (L-Band)	-7 dBic	1 dBic	≤ 11 dB	≤ 9 dB	≤ 4 dB
1602.00MHz (GLONASS)	-7 dBic	0 dBic	≤ 11 dB	≤ 9 dB	≤ 4 dB

\*Elevating Angle @ 90° (Zenith)



### Low Noise Amplifier (LNA) Specifications

<b>Frequency Band (MHz):</b> 1575.42 +/-10 MHz (GPS L1) 1227.60 +/-10 MHz (GPS L2) 1525.00 - 1610.00 MHz (L Band) 1602.00 +/-10 MHz (GLONASS G1)
<b>Amplifier Gain:</b> 33 dB +/- 4dB
<b>Nominal Impedance:</b> 50 ohms
<b>Output VSWR:</b> <2.0:1
<b>Noise Figure:</b> 2.5 dB (typ.)
<b>DC Voltage:</b> 3.3 to 12.0 VDC through connector 30V survival voltage
<b>DC Current:</b> 42 mA typical ≤ 50 mA

### Mechanical Specifications

Antenna Dimensions (LxWxH)	Antenna Weight	Radome Color*	Mounting Method
119.6 x 80.4 x 28 mm (4.71" x 3.17" x 1.10")	6.8 oz. nominal	White	Magnetic mount with > 20 lb pull force

### Environmental Specifications

Temperature	Altitude	ESD Protection
-40°F to +185°F (-40°C to 85°C)	70,000 ft	15kV

Immersion	Vibration
Mil Std 810F, Method 512.4, Procedure 1 with immersion depth 2 m	Mil Std 810F, Method 514.5, Procedure II, Category 5

\*Custom color options are available upon request