

L1G1A-STD

GNSS L1/G1/E1 Active Antenna

DESCRIPTION

The L1G1A-STD is a professional grade, active GNSS L1/G1/E1 antenna built for long lasting, trouble-free deployment. It is small and lightweight, with exceptional protection against the elements.

Built to support the wireless telecommunications industry, including DAS, the precise L1G1A antenna features low noise and high gain to provide optimum signal quality.

Designed for easy installation in outdoor locations, the durable, unobtrusive cover protects against UV, rain, lightning, or chemicals.

FEATURES

- GNSS Bands:
 - GPS L1
 - GLONASS L1
 - GALILEO E1
- Low noise and high gain
- Integrated lightning protection
- Easy to install
- Operates in a wide range of environmental conditions
- RoHS-Compliant (Pb-free)

OPTIONS

This GNSS antenna is available with several different configuration options. Please contact GPS Source for further information on product options.

RELATED PRODUCTS:

L1AW, L1PW, L1G1A, L1G1P, S14GT, S18GT, RMS216, RMS232



L1G1A-STD DATA SHEET

059-FAN-MBQ-XCX-RXZ-002

05/11/2016

www.gpssource.com

AS9100C:2009 and ISO 9001:2008 Compliant Company

1 L1G1A-STD Specifications

Table 1-1. Electrical Specifications

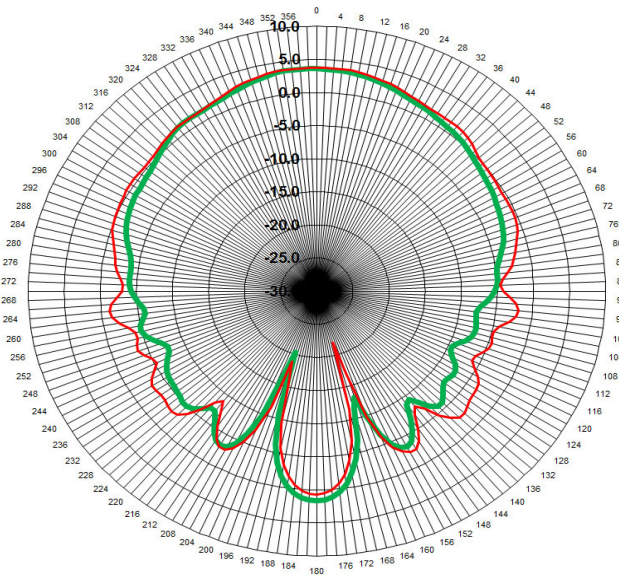
Operating Temperature -54°C to 71°C

Parameter		Conditions	Min	Typ	Max	Units
Frequency Range (Passband)	GPS L1	Ant: Output = 50Ω	1559	1575.42	1610	MHz
	GLONASS L1					
	Galileo E1					
Out Impedance				50		Ω
Element Gain	GPS L1	Output = 50Ω	> +3			dBiC
	GLONASS L1		>+3			
	Galileo E1		> +3			
LNA Gain	GPS L1	Output = 50Ω	> +30			dB
	GLONASS L1		> +30			
	Galileo E1		> +30			
Output SWR		Output = 50Ω			2:1	—
Required DC Input Voltage			3		16	VDC
LNA Current		Output = 50Ω			50	mA
LNA OPIdb Compression				10		dBm
LNA OIP3				15		dBm
Noise Figure					3.0	dB
Polarization		Right Hand Circular				
Axial Ratio at Peak		< 6 dB Max				
Beam Width		75 +/-5° at -3dB from Peak (Free Space)				
Altitude		50,000 ft				
Lightning Protection		EN6100-4-5, 8/20 μs		4		KA

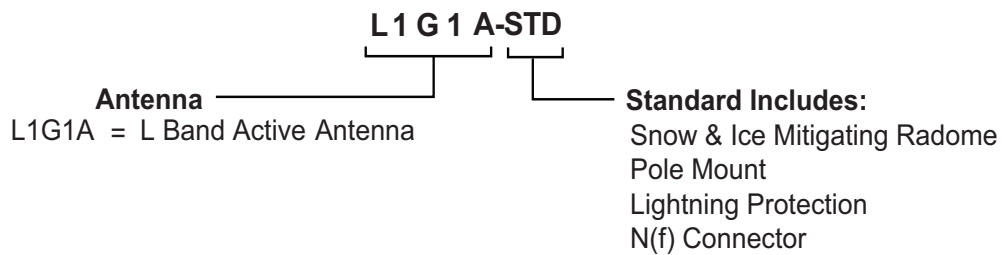
2 Performance Data

2.1 L1 Radiation Pattern

Figure 2-1. Measured at 1575 MHz



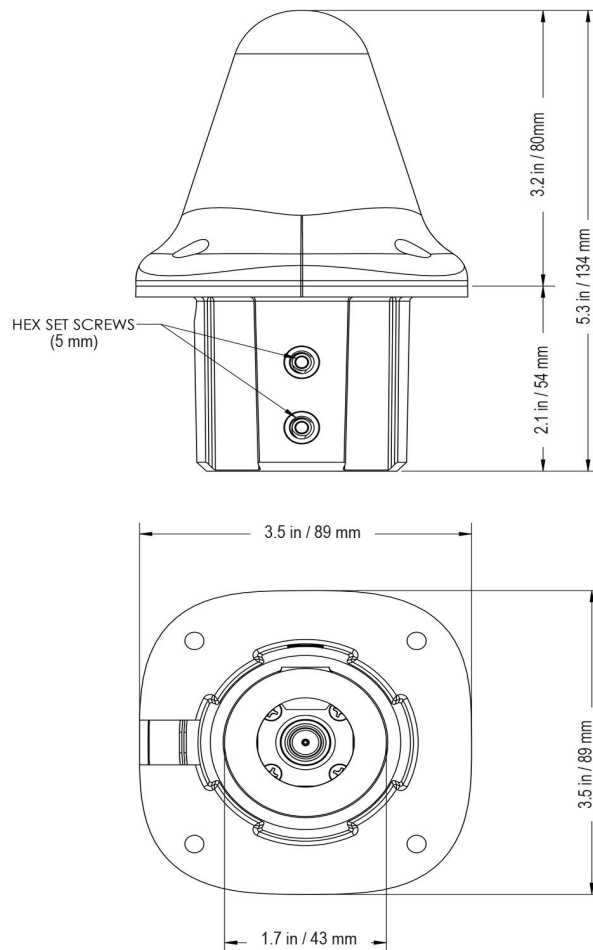
3 Product Code Decoder

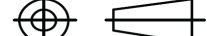


Note: Other configurations are available for this GNSS antenna product. Contact GPS Source at wireless@gpssource.com or visit the website at www.gpssource.com.

4 Mechanical Drawing

4.1 L1G1A-STD GNSS L1/G1/E1 Active Antenna



GPS Source Part No. L1G1A-STD	Finish N/A	Size C	Mass .59 lbs	Tolerances	
Description L1G1 ACTIVE BOTTOM MOUNT N(F) ANTENNA	Material SEE BOM	3rd Angle Projection 	Linear		Angular
			.X = ± .1		±1°
			.XX = ± .01		RADII
			.XXX = ± .005		See Linear
Dimensions are in inches unless otherwise specified. IAW ASME Y14.5M - 1994					



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64 N. Mission Drive
Pueblo West, CO 81007
Phone: (+1)(719) 561.9520
Fax: (+1)(719) 565.0890
wireless@gpssource.com
www.gpssource.com

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