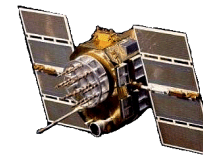




# Active or Passive L1/L2 GPS Antennas, P/N: 2G1215A-XMS-X

## 2.6" Diameter, Flat Strong Magnetic (38lbs) Mount Configurations



ISO 9001:2008/FAA Approved Facility Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

ANTCOM CORPORATION . 367 Van Ness Way, #602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: [antennas@antcom.com](mailto:antennas@antcom.com) . <http://www.antcom.com>

**SIZE:** 2.6" SQ. 1215: L1/L2 A: WITH LNA  
1.9: 1.9" SQ. 15: L1 ONLY AL: WITH LNA/LIMITTER  
2: 2.6" DIA. P: WITHOUT LNA  
3: 3.5" DIA. A2: WITH 20 LNA WITHOUT REJECTION FILTERS.  
4: MINI ARINC A4: WITH 40 LNA WITHOUT REJECTION FILTERS.

**MECHANICAL:**  
DIAMETER: 2.60 in. [66.04 mm]  
HEIGHT: 1.0 in. [25.4 mm], 0.742 [18.85] for No Magnet Option  
WEIGHT: 7.00 oz. [0.198 Kg], 4.00 oz. [0.113 Kg] (WITHOUT MAGNET)  
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
CONNECTOR: SMA FEMALE (OPTION: TNC, N, MCX, MMCX, or Cable)

**ENVIRONMENTAL:**  
TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]  
ALTITUDE: 70,000 ft.  
VIBRATION: > 30 G's  
LEAKAGE: HERMETICALLY SEAL

**FEDERAL & MILITARY SPECIFICATIONS:**  
DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455  
ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED
A	1	LABEL ON THE BOTTOM	April/10/07	S.H

**ELECTRICAL:**

	L1: (1575.42 ±15) MHz			L2: (1227.60 ±15) MHz		
	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
FREQUENCY:						
RADIATION PATTERN:	HEMISPHERICAL			HEMISPHERICAL		
POLARIZATION:	RHCP			RHCP		
VSWR:	< 1.5:1			< 1.5:1		
IMPEDANCE:	50 ohms			50 ohms		
ANTENNA GAIN (dBic):						
@ 90 ° (ZENITH):	+ 5.0	+ 4.7	+ 3.1	+ 0.7	+ 3.3	+ 4.5
@ 10 ° Elevation:	- 2.1	- 1.8	- 1.9	- 5.8	- 3.8	- 3.5
@ 20 ° Elevation:	- 0.6	- 0.3	+ 0.6	- 4.3	- 2.0	- 0.8
@ 30 ° Elevation:	+ 0.9	+ 1.4	+ 1.7	- 3.4	- 0.5	+ 1.4
@ 60 - 90 ° Elevation:	> 4.0	> 3.9	> 2.4	> - 0.9	> 2.7	> 2.2
BEAM WIDTH (3dB):	103 Deg.	114 Deg.	143 Deg.	94 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING			DC GROUNDING		
LNA GAIN:	33 dB			35 dB		
LNA NOISE FIGURE:	3.0 dB			3.0 dB		
LNA P1dB Out:	+13 dBm			+13 dBm		
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24V)/<50mA					
REJECTION @ (-50/+50) MHz	-41 dB / -59 dB			-40 dB / -40 dB		
@ (-100/+100) MHz	< -65 dB			< -65 dB		
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)					

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**ELECTRICAL:**

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	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
FREQUENCY:						
RADIATION PATTERN:	HEMISPHERICAL			HEMISPHERICAL		
POLARIZATION:	RHCP			RHCP		
VSWR:	< 1.5:1			< 1.5:1		
IMPEDANCE:	50 ohms			50 ohms		
ANTENNA GAIN (dBic):						
@ 90 ° (ZENITH):	+ 5.0	+ 4.7	+ 3.1	+ 0.7	+ 3.3	+ 4.5
@ 10 ° Elevation:	- 2.1	- 1.8	- 1.9	- 5.8	- 3.8	- 3.5
@ 20 ° Elevation:	- 0.6	- 0.3	+ 0.6	- 4.3	- 2.0	- 0.8
@ 30 ° Elevation:	+ 0.9	+ 1.4	+ 1.7	- 3.4	- 0.5	+ 1.4
@ 60 - 90 ° Elevation:	> 4.0	> 3.9	> 2.4	> - 0.9	> 2.7	> 2.2
BEAM WIDTH (3dB):	103 Deg.	114 Deg.	143 Deg.	94 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING			DC GROUNDING		
LNA GAIN:	33 dB			35 dB		
LNA NOISE FIGURE:	3.0 dB			3.0 dB		
LNA P1dB Out:	+13 dBm			+13 dBm		
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24V)/<50mA					
REJECTION @ (-50/+50) MHz	-41 dB / -59 dB			-40 dB / -40 dB		
@ (-100/+100) MHz	< -65 dB			< -65 dB		
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)					

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MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
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FREQUENCY:						
RADIATION PATTERN:	HEMISPHERICAL			HEMISPHERICAL		
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VSWR:	< 1.5:1			< 1.5:1		
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@ 90 ° (ZENITH):	+ 5.0	+ 4.7	+ 3.1	+ 0.7	+ 3.3	+ 4.5
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@ 20 ° Elevation:	- 0.6	- 0.3	+ 0.6	- 4.3	- 2.0	- 0.8
@ 30 ° Elevation:	+ 0.9	+ 1.4	+ 1.7	- 3.4	- 0.5	+ 1.4
@ 60 - 90 ° Elevation:	> 4.0	> 3.9	> 2.4	> - 0.9	> 2.7	> 2.2
BEAM WIDTH (3dB):	103 Deg.	114 Deg.	143 Deg.	94 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING			DC GROUNDING		
LNA GAIN:	33 dB			35 dB		
LNA NOISE FIGURE:	3.0 dB			3.0 dB		
LNA P1dB Out:	+13 dBm			+13 dBm		
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24V)/<50mA					
REJECTION @ (-50/+50) MHz	-41 dB / -59 dB			-40 dB / -40 dB		
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@ 20 ° Elevation:	- 0.6	- 0.3	+ 0.6	- 4.3	- 2.0	- 0.8
@ 30 ° Elevation:	+ 0.9	+ 1.4	+ 1.7	- 3.4	- 0.5	+ 1.4
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AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING			DC GROUNDING		
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LNA NOISE FIGURE:	3.0 dB			3.0 dB		
LNA P1dB Out:	+13 dBm			+13 dBm		
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