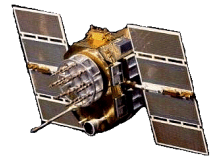




# Active or Passive L1/L2 GPS Antennas, P/N: 1.9G1215X-18RS-X-3

## 1.9" Square, Flat Mount with Cable 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>

7 6 5 4 3 2 1

NOTICE OF PROPRIETARY RIGHTS  
THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU IS EXPRESSLY PROHIBITED UNLESS YOU AGREE THAT ITS USE IS LIMITED TO USE WITH YOUR COMPANY ONLY AND DOES NOT INCLUDE MANUFACTURE OR REPRODUCTION THEREOF. OTHER USE IS EXPRESSLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM CORP.

1.900 [48.26] SQ.

4x0.125 [ø3.18] Thru. for 4-40 Mounting Screws, 0.138" Thick

.138 [3.51]

.400 [10.16], 0.533 [13.54] (with LNA)

.829 [21.05]

1.658 [42.10]

Optional Mounting: ADHESIVE GASKET

1.658 [42.10]

4x0.250 [ø6.35]

SMA RIGHT ANGLE, X" LONG CABLE (OPTIONAL: SMA, SMB, MCX, MMCX, SSMA, SSMB, SSMC, SSMP, TNC, OR N)

2. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

REV 1

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	

**SPECIFICATIONS**

**ELECTRICAL:**

FREQUENCY:	L1: (1575.42 ±12) MHz			L2: (1227.60 ±12) MHz		
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP			RHCP		
VSWR:	< 1.5:1			< 1.5:1		
IMPEDANCE:	50 ohms			50 ohms		
ANTENNA GAIN (dBic):	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
@ 90 ° (ZENITH):	+3.7	+4.7	+3.1	-1.7	+3.3	+4.5
@ 10 ° Elevation:	-2.9	-1.8	-1.9	-7.3	-3.8	-3.5
@ 20 ° Elevation:	-1.3	-0.3	+0.6	-6.2	-2.0	-0.8
@ 30 ° Elevation:	0.0	+1.4	+1.7	-5.2	-0.5	+1.4
@ 60 - 90 ° Elevation:	> 3.0	> 3.9	> 2.4	> -3.2	> 2.7	> 2.2
BEAM WIDTH (3dB):	108 Deg.	114 Deg.	143 Deg.	100 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING					

**LNA OPTION:**

LNA GAIN:	20 dB	20 dB
LNA NOISE FIGURE:	1.9 dB	1.8 dB
LNA P1dB Out:	+13 dBm	+13 dBm
LNA DC POWER:	2.5V/10mA, 3V/10mA, 3.3V/12mA, (2.5-24)V/<20mA	
POWER HANDLING:	1 Watt CW, MORE WITH LIMITTER OPTION	

**MECHANICAL:**

SIZE: LENGTH = 1.90 in. [48.26 mm], WIDTH = 1.90 in. [48.26 mm]  
HEIGHT: 0.400 in. [10.16 mm]

WEIGHT: 2.88 oz. (82 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
BASE IRIDITE PER MIL-C-544 1

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT

CONNECTOR: SMA RIGHT ANGLE MALE WITH 18" CABLE (OPTION: SMB, SMC, SSMA, SSMA, SSMC, SSMP, MCX, MMCX, TNC, OR N)

**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

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REV
1	ADHESIVE GASKET	123456-3M-1G				5
1						3
1						2
1						1
-2	-1					

P/N: 1.9G1215A2-18RS-X-3

CABLE'S LENGTH :	CONNECTOR :	COLOR :
X: NO CABLE	S: SMA; RS: R-SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAC, N: NO MAC	M: MCX; MM: MMCX; SMB	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
F: CABLE LENGTH (IN)	SSMA; SSMB; SSMC; SSMP	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T, TB; TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES  
FRACTIONS DECIMALS AND ANGLES  
TOLERANCE .010 PER ANSI Y14.5  
± 1/64 .015 ± 1'  
± .005 .005 ± 1'  
REMOVE ALL BURRS  
BREAK EXTERNAL EDGES .010 TO .015  
FALLS IN CLASS 15.0  
SHOW THERMAL STRESS ANALYSIS  
DATE ON A COMMON 2.0000  
MACHINED SURFACES  
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

1.9" SQ. ACTIVE OR PASSIVE L1/L2 GPS ANTENNA WITH CABLE

DRN: \_\_\_\_\_  
DCKED: \_\_\_\_\_  
ENGR: \_\_\_\_\_  
APPROVED: S. HUYNH Feb-19-04  
Dwg File No: \_\_\_\_\_  
SCALE 1/1

D3CVE11.9G1215X-18RS-X-3

SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas