

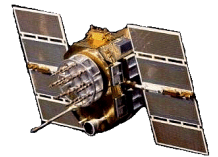


ISO 9001:2008/FAA Approved Facility

Passive L1/L2 GPS Antenna

P/N: 1.9G1215P-XRS-X-LM

(1.9" Sq. x 0.355" Thick), Flat Mount Configuration



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1.91 [48.56] SQ.

4x R.72 [R18.19]

.355 [9.02]

0.10" (PIN), 0.25" [6.37] (MCX/MMCX), 0.46" [11.68] (SMA/R-SMA), 0.57" [14.53] (TNC), 0.83" [21.00] (TNC-BH), 0.72" [18.29] (N, N-BH)

4x 4-40 UNC
.100 DEEP

2X 1.34 [33.92]

.15 [3.77]

.26 [6.48]

ADHESIVE MOUNTING OPTIONAL

SMA-R FEMALE CONNECTOR (OPTION: TNC, TNC Bulkhead, N, N-Bulkhead, MCX, MMCX, or Cable) Clearance Hole: 0.4" Dia. for SMA, MCX, & MMCX Con. 0.52" Dia. for TNC Con. 0.63" Dia. for N Con.

SPECIFICATIONS

ELECTRICAL:

	L1: (1575.42 ±12) MHz			L2: (1227.60 ±12) 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					
POLARIZATION:	RHCP					
VSWR:	< 1.5:1					
IMPEDANCE:	50 ohms					
ANTENNA GAIN (dBic):						
@ 90° (ZENITH):	+ 2.7	+ 4.7	+ 3.1	+ 1.5	+ 3.3	+ 4.5
@ 10° Elevation:	- 4.4	- 1.8	- 1.9	- 6.7	- 3.8	- 3.5
@ 20° Elevation:	- 2.3	- 0.3	+ 0.6	- 5.6	- 2.0	- 0.8
@ 30° Elevation:	- 0.8	+ 1.4	+ 1.7	- 4.5	- 0.5	+ 1.4
@ 60 - 90° Elevation:	> 2.0	> 3.9	> 2.4	> 0.0	> 2.7	> 2.2
BEAM WIDTH (3dB):	113 Deg.	114 Deg.	143 Deg.	85 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB					
LIGHTNING PROTECTION:	DC GROUNDING					

MECHANICAL:

SIZE: 1.912 in. [48.56 mm] SQ.
HEIGHT: 0.355 in. [9.02 mm]
WEIGHT: 2.0 oz. (56.7 g)
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDIUM PER MIL-C-5441
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE THERMOSET PLASTIC RADOME, UV, ABRASION AND SKYDROL RESISTANCE
CONNECTOR: SMA-R FEMALE (OPTION: SMA, TNC, TNC-Bulkhead, N, N-Bulkhead, 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, AND MIL-STD-810

SIZE:	FREQ. BAND:	LNA:	QTY	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REV
1: 2" SQ.	1215: L1/L2	A2: WITH 20 dB LNA							3
1.9: 1.9" SQ.	15: L1 ONLY	A4: WITH 40 dB LNA							2
2: 2.6" DIA.		P: WITHOUT LNA		ADHESIVE GASKET	12345G-3M-1G				1
3: 3.5" DIA.			-1						
4: MINI ARINC									

P/N: 1.9G1215P-XRS-4-LM

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	RS: R-SMA	-1: GLOSS WHITE #17825 PER FED-STD-595B
M: MAG. N; NO MAG.	IS: SMA; P: P2: PINS	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
R: CABLE LENGTH (IN)	MC: MCX; MM: MMCX	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TNC; N: N	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

2. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMAL ANGLES ± 1/64 .001 .005 ± 1°

TOLERANCE SYM PER ANSI Y14.5 BREAK EXTERNAL EDGES .005 TO .015 FILED .005 TO .010 SLOPE BREAKS PER MIL-S-8870 DAT 8 ON A COMMON C OF .005 MACHINED SURFACES ✓ DO NOT SCALE DRAWING

ORIGINAL DRAWN S. HUYNH Sep-19-01
ORIGINAL REDRAWN S. HUYNH Sep-18-01
UPDATED S. HUYNH Apr-07-15
UPDATE DRAWN P. TRAN Apr-07-15
APPROVED S. HUYNH Apr-07-15

ANTCOM CORP. TORRANCE, CALIFORNIA
1.9" SQUARE L1/L2 PASSIVE GPS ANTENNA
D|3CVE1| 1.9G1215P-XRS-4-LM | -
SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas