



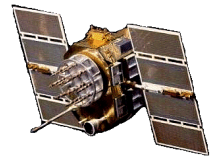
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Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

Dual Polarization (RHCP/LHCP) L1/L2 GPS Antenna

P/N: 1.9G1215RL-PP-XRS-X

1.9" Square Configurations with Back Mounting Option



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1.91 [48.56] SQ.

4xR.72 [R18.19]

3.6 [9.02] (+/-0.010in)

.12 [3.05]

0.10" (PIN), 0.25" [6.37] (MCX/MMCX), .53 [13.46] (SMA/R-SMA), 0.57" [14.53] (TNC), 0.83"[21.00] (TNC-BH), 0.72" [18.29] (N, N-BH)

2X.15 [3.77]

MOUNTING: ADHESIVE

SMA Right Angle Female Con. (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.

2xØ.37 [Ø9.52]

2X.25 [6.48]

SIZE	FREQ. BAND	POLARIZATION	LNA
1: 2" SQ	1215: L1/L2	RL: RHCP/LHCP	A: WITH LNA
1.9: 1.9" SQ.	15: L1 ONLY	VL: VERT/HOR	AL: WITH LNA/LIMITER
2: 2.6" DIA			P: WITHOUT LNA
3: 3.5" DIA			PL: WITHOUT LNA and THINNER (HEIGHT = 0.58")
4: MINI ARINC			

P/N: 1G1215RL-PP-XRS-1

CABLE'S LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA; RS: SMA-R; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N: NO MAG.	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	N, NB: N, N-Bulkhead	-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

1 2 3 4 5 6

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz				
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP/LHCP					
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):	+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		2 dB			
LIGHTNING PROTECTION:	DC GROUNDING					

LNA OPTION:

LNA GAIN: (21.0+/-2.0) dB
LNA NOISE FIGURE: 1.8 dB
LNA P 1dB Out: +16 dBm
VOLTAGE/CURRENT: (+2.8 TO +28) Volts DC / (15 TO 25) mA

MECHANICAL:

SIZE: 1.912 in. [48.56 mm] SQ.
HEIGHT: 0.36 in. [9.02 mm]
WEIGHT: 2.3 oz. (65 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: 0.030" DIA. PIN, 0.100" LONG (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

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
1	ADHESIVE GASKET	12345C-3M-1G	-	-	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
FRACTIONS TOLERANCES ARE DECIMALS ANGLES ± 1/64 .XXX ± 1°
TOLERANCE SYM PER ANSI Y14.5
REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 FILLETS R .005 TO R .030 SCREW THREADS PER MIL-S-8879 DIA'S ON A COMMON & Z .005
MACHINED SURFACES ✓
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

1.9" SQUARE, L1/L2 PASSIVE RHCP/LHCP GPS ANTENNA

DRAWN	CHECKED	ENGINEER	APPROVED	S. HUYNH Sep-19-01	SIZE	DRAWING NO	REV
					D 3C VE1	1.9G1215RL-PP-XRS-4	A
CAD FILE NO	SCALE	SHEET		1 OF 1			
	1/1						

6 5 4 3 2 1

NMO Connector Option is Now Available for Some Antennas