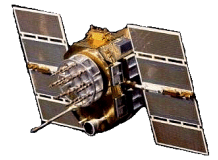




# 20,000G L1 GPS Antenna, P/N: 0.9G15P-XX-X-U Rev A

## 1.2" Square, Front Mount, Back Cable Configurations



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

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### SPECIFICATIONS

**ELECTRICAL:**

FREQUENCY:	L1: (1575.42 ±12) MHz	
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	Free Space	3 in G.P.
@ 90° (ZENITH):	- 0.8	+ 3.8
@ 10° Elevation:	- 9.3	- 4.3
@ 20° Elevation:	- 6.8	- 2.2
@ 30° Elevation:	- 5.2	- 0.7
@ 60 - 90° Elevation:	> - 2.1	> 2.5
BEAM WIDTH (3dB):	100 Deg.	120 Deg.
AXIAL RATIO:	2.5 dB	
LIGHTNING PROTECTION:	DC GROUNDING	

**LNA OPTION:**

LNA GAIN: 24.0 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: 1.250 in. [31.75 mm] SQ.  
 HEIGHT: 0.547 in. [13.89 mm]  
 WEIGHT: 0.95 oz. (27 g)  
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
 BASE IRIDITE PER MIL-C-5441

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

CONNECTOR: 4.5" LONG FLEXIBLE CABLE WITH RIGHT ANGLE MMCX (OPTION: MCX, SMA, SMB, SSMA, SSMB, SSMC, OR TNC)

**ENVIRONMENTAL:**

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]  
 ALTITUDE: 70,000 ft.  
 VIBRATION: 20,000 G's  
 LEAKAGE: HERMETICALLY SEAL

**FEDERAL & MILITARY SPECIFICATIONS:**

DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-145208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	
A		3dB More in Gain	Sep-21-06 S.H
B			

OUTPUT PORT FROM THE BOTTOM (PIN, MMCX, MCX, SMA R-SMA, SSMA, SMB, SSMC, SSMC, SSMC)

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

**P/N: 0.9G15P-4.5MM-4-U**

SIZE	FREQ BAND	LNA	High Shock/Vibrator Options:
1: 1.2" SQ.	1215: L1/L2	A2: WITH 20 dB LNA	U: 20,000G
1.9: 1.9" SQ.	15: L1 ONLY	A4: WITH 40 dB LNA	
2: 2.6" DIA		P: WITHOUT LNA	
3: 3.5" DIA			
4: MINIARINC			

QUANTITY	REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REQD
							5
1		ADHESIVE GASKET	12345G-3M-1.2G				3
1							2
1							1
-2	-1						

CABLE LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA, R: S-SMA, P: PINS, M: MCX	-1: GLOSS WHITE #17925PER FED-STD-595B
M: MAG, N: NOMAG	MM: MMCX, SMB: SSMA, SSMB, SSMC	-2: LUSTERLESS GRAY #36320PER FED-STD-595B
# CABLE LENGTH (IN)	SSMP, T: TB, TNC, TNC Bulkhead	-3: OLIVEDRAB GREEN #34031PER FED-STD-595B
R: RIGHT ANGLE CON.	L-RM: Right Angle Male Lemo	-4: LUSTERLESS BLACK #37038PER FED-STD-595B

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE IN INCHES  
 FRACTIONS DECIMALS ANGLES  
 ± 1/64 ± .005 ± 1°  
 TOLERANCE 51M PER ANSI Y14.5  
 REMOVE ALL BUMPS  
 BREAK EXTERNAL EDGES .005 TO .015  
 FILED & .005 TO .010  
 BREAK SURFACES PER MIL-C-8879  
 DIA'S ON A COMMON ± .0005  
 MACHINED SURFACES ✓  
 DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE, CALIFORNIA

High Vibration  
L1  
GPS ANTENNA

APPROVED: S. HUYNH Mar-11-05

DWG NO: 3CVE1 0.9G15X-XX-X-U

SCALE: 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas