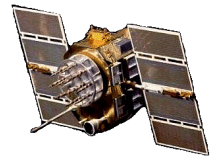




ISO 9001:2008/FAA Approved Facility

**20,000G L1 GPS Antenna**  
**P/N: 0.9G15P-12MM-4-U-440** (Passive, 12" MMCX Cable)  
**P/N: 0.9G15P-12S-4-U-440** (Passive, 12" SMA Male Cable)  
**1.250" Sq. x 0.447in Thick, Front Mount, Back Cable Configuration**

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



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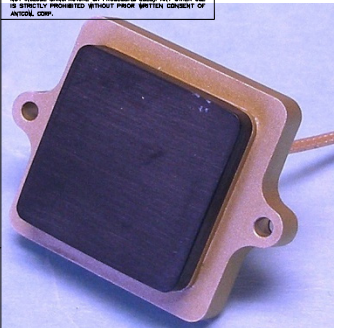



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1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]  
 NOTES: UNLESS OTHERWISE SPECIFIED:

**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 (Active):**

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: 0.447 in. [13.89 mm]  
 WEIGHT: 0.95 oz. (27 g)  
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441F  
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT  
 CONNECTOR: CABLE/ MMCX CONNECTOR (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-I-45208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED
A	ADDED	RADOME-REVISED HEIGHT	04-14-14	S.H.

1.250 [31.75] SQ.

4X R.105 [R2.67]

4X R.093 [R2.36]

.447 [11.35]

.220 [5.59]

.080 [2.03]

CABLE/MMCX CONNECTOR (OPTION: MCX, SMA, SMB, SSMA, SSMB, SSMC, OR TNC)

2X 4-40 UNC THRU

1.450 [36.83]

.168 [4.27]

.168 [4.27]

**P/N: 0.9G15P-12MM-4-U-440**

SIZE:	FREQ. BAND:	LNA:	High Shock/Vibration Options:	1						3	
1; 2" SQ.	1215; L1L2	A2; WITH 20 dB LNA	U; 20,000G	1						2	
1.9; 1.9" SQ.	15; L1 ONLY	A4; WITH 40 dB LNA		1						1	
2; 2.6" DIA.		P; WITHOUT LNA		-2	-1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	TEST NO
3; 3.5" DIA.				QUANTITY REQD							
4; MINI ARINC				PARTS LIST							

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; RS: R-SMA; P: PINS; M: MCX;	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N: NO MAG.	MM; MMCX; SMB; SSMA; SSMB; SSMC;	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
P: CABLE LENGTH (IN)	SSMP; SMP;	-3: CAMO GREEN #34094 PER FED-STD-595B
R: RIGHT ANGLE CON.	T; TB; TNC; TNC-Bulkhead; N; N;	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		-5: DESERT TAN #33446 PER FED-STD-595B

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	FRACIONS DECIMALS ANGLES
± 1/64 ± .005 ± .1°	± .010 ± .005 ± .1°
TOLERANCE 5/16 PER ANG V14.5	RESAVE ALL SURFACES
BREAK EXTERNAL EDGES .005 TO .015	FILED R .005 TO R .010
SOFTEN HEADS PER MIL-C-8879	PAVS ON A COMMON 1/2 DIA
MACHINED SURFACES 1/2	
DO NOT SCALE DRAWING	

ANTCOM CORP. TORRANCE, CALIFORNIA	
HIGH VIBRATION L1 GPS ANTENNA	
DATE TIME BY	DATE TIME BY
D 13CVE1	0.9G15P-12MM-4-U-440
SCALE 1/1	SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas