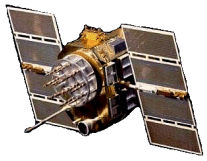
L1/L2 GPS Antenna, P/N: 1.3G1215A-XNX-3 Rev. C

1.28" Square x .78" Height, Grommet Side Cable/Connector Configurations



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

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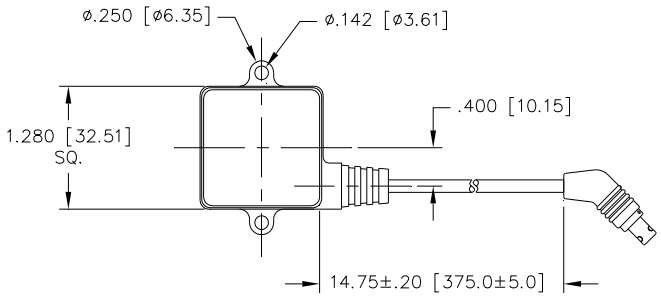
REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	ADDED CUSTOMER'S CONNECTOR	05/29/12	S.H.
	B	REVISED CABLE TOLERANCE AND VSWR	09/20/12	S.H.
	C	REVISED CABLE LENGTH PER AUCON	09/25/12	S.H.



SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz		L2: (1227.60 ±12) MHz	
RADIATION PATTERN:	HEMISPHERICAL			
POLARIZATION:	RHCP			
VSWR:	< 2.0:1		< 2.0:1	
IMPEDANCE:	50 ohms		50 ohms	
ANTENNA GAIN (dBic):	Free Space	3 in G.P.	Free Space	3 in G.P.
@ 90 ° (ZENITH):	- 0.8	+ 3.8	-3.7	+ 2.7
@ 10 ° Elevation:	- 9.3	- 4.3	- 9.9	- 6.3
@ 20 ° Elevation:	- 6.8	- 2.2	- 9.2	- 4.2
@ 30 ° Elevation:	- 5.2	- 0.7	- 7.8	- 2.4
@ 60 - 90 ° Elevation:	> - 2.1	> 2.5	> - 4.7	> 1.3
BEAM WIDTH (3dB):	100 Deg.	120 Deg.	100 Deg.	90 Deg.
AXIAL RATIO:	2.5 dB		3	
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:	1.280 in.[32.51 mm] SQ. HEIGHT: 0.784 in. [13.89 mm]
WEIGHT:	1.7 oz. (48.2 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:	ODU-AMC 15.7" CABLE RIGHT ANGLE MALE CONNECTOR

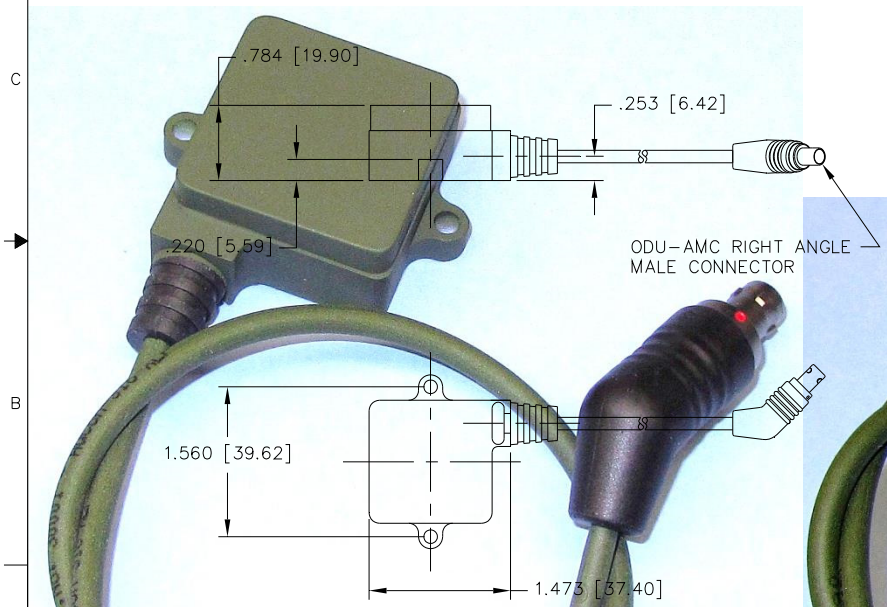
ENVIRONMENTAL:

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



SIZE:	FREQ BAND:	LNA:
1: 2" SQ.	1215: L1/L2	A: WITH LNA
1.9: 1.9" SQ.	15: L1 ONLY	P: WITHOUT LNA
2: 2.6" DIA.		
3: 3.5" DIA.		
4: MINI ARINC		

P/N: 1.3G1215A-15.7NX-3

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
##: CABLE LENGTH (IN)	SSMP, T, TB: TNC, TNC-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
R: RIGHT ANGLE CON.	L-RM: Right Angle Male Lemo	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
1	ADHESIVE GASKET	123456-3M	–	–	–	1
-2	-1	PARTS LIST				

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ± 1/64 DECIMALS .XX± .015 .XXX± .005 ANGLES ± 1°
REMOVE ALL BURRS AND SHARP EDGES
INTERPRET DIMENSIONS & TOLERANCES PER ASME Y14.5M
SURFACE FINISH PER MIL-S-8879
DIM'S ON A COMMON SURF. ± .005
MACHINED SURFACES 125
DO NOT SCALE DRAWING

ORIGINALLY DRAWN	S. HUYNH	Mar-11-05
ORIGINALLY DESIGNED	S. HUYNH	Mar-11-05
UPDATED	S. HUYNH	Sept-20-12
UPDATE DRAWN	P. TRAN	Sept-20-12
APPROVED	S. HUYNH	Sept-20-12

ANTCOM CORP. TORRANCE CALIFORNIA

OUTLINE DRAWING
L1/L2 ACTIVE or PASSIVE
GPS ANTENNA

SIZE	CAGE NO	DRAWING NO	REV
D	3CVE1	1.3G1215A-XNX-X	C

SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas