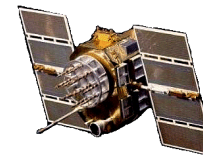




Active L1/L2 GPS Antennas for Deep Sea Applications



P/N: 1G1215A-XSC-2-UU

Other Frequencies and Connector Options are Available. *Depth Rate = 10 Km (14,555 PSI)*



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

ANTCOM CORPORATION . 367 Van Ness Way, #602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

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SIZE:
1: 2" SQ.
1.5: 1.9" SQ.
2: 2.6" DIA.
3: 3.5" DIA.
4: MINI ARINC

CONNECTOR:
RSC: R-SMA; SC: SMA
MC: MCX; MMC: MMCX; PC: PINS
NC, NBC: N, N-Bulkhead
TC, TBC: TNC, TNC-Bulkhead

COLOR:
-1: GLOSS WHITE #17925 PER FED-STD-595B
-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
-3: CAMO GREEN #34094 PER FED-STD-595B
-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
-5: DESERT TAN #33446 PER FED-STD-595B
-UU: TEFLON COATED

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
B		POTTING FOR UNDERWATER	07/19/16	S.H
C		4-40 UNF to UNC	Sep/13/16	S.H

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±15) MHz	L2: (1227.60 ±15) MHz
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	RHCP
VSWR:	< 1.5:1	
IMPEDANCE:	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):	+3.7 +4.7 +3.1	-1.7 +3.3 +4.5
@ 10 ° Elevation:	-2.9 -1.8 -1.9	-7.3 -3.8 -3.5
@ 20 ° Elevation:	-1.3 -0.3 +0.6	-6.2 -2.0 -0.8
@ 30 ° Elevation:	0.0 +1.4 +1.7	-5.2 -0.5 +1.4
@ 60 - 90 ° Elevation:	> 3.0 >3.9 >2.4	> -3.2 >2.7 >2.2
BEAM WIDTH (3dB):	108 Deg. 114 Deg. 143 Deg.	100 Deg. 106 Deg. 74 Deg.
AXIAL RATIO:	2 dB	
LIGHTNING PROTECTION:	DC GROUNDING	
LNA GAIN:	33 dB	35 dB
LNA NOISE FIGURE:	3.0 dB	3.0 dB
LNA P1dB Out:	+13 dBm	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA	
REJECTION @ (-50/+50) MHz:	-41 dB / -59 dB	-40 dB / -40 dB
@ (-100/+100) MHz:	< -65 dB	
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)	

MECHANICAL:

SIZE: LENGTH: 2.093 in. [53.16 mm], WIDTH: 2.093 in. [53.16 mm]
HEIGHT: 0.741 in. [18.82 mm]

WEIGHT: 3.8 oz. (107.7 g)

FINISH: TEFLON COATED

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

CONNECTOR: SMA FEMALE
(OPTION: 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, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

QUANTITY REQD: 1 1 -2

1	2
1	1
-2	-1

PARTS LIST

QTY	DESCRIPTION	PART NO.	SPECIFICATION	MATERIAL	FINISH	REF. NO.
1	ANTENNA					

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

FRACTIONS: DECIMALS: ANGLES: ± 1/64 0.0005 30 MIN. 0.00 ± 1°

TOLEANCE 5M PER ANS Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES 0.005 TO .015
SMOOTH THREADS PER MIL-S-8879
MATS ON A COMB OF 27-008
MACHINED SURFACES ✓

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

Center Connector
2in Square Active
L1/L2 GPS ANTENNA

DATE: 07/19/16
DRAWN BY: S. HUYNH
CHECKED BY: P. TRAN
APPROVED BY: S. HUYNH

D3CVE1 1G1215A-XXC-X-UU C

SCALE: 1/1 SHEET 1 OF 1