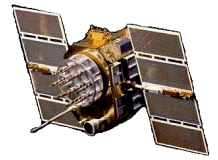




Active or Passive L1/L2 GPS Antennas, P/N: 2G1215X-XX-X

P/N: 2G1215A-XSS-2 (Stainless Steel SMA)

2.6" Diameter, Bulkhead/Back Mount Configurations



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>

NOTICE OF PROPRIETARY RIGHTS
THIS DOCUMENT CONTAINS CONFIDENTIAL, TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU IS EXPRESSLY PROHIBITED UNLESS YOUR AGREEMENT THAT ITS USE IS LIMITED TO USE WITH YOUR COMPANY ONLY CAN BE PROVEN. ANY OTHER USE, INCLUDING MANUFACTURE OR PROCESSING UNDER ANY OTHER USE IS EXPRESSLY PROHIBITED WITHOUT WRITTEN CONSENT OF ANTCOM CORP.

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		ACTIVE L1/L2 GPS ANTENNA		
		P/N: 2G1215A-XS-2		
		REV: 0603 VIT, AS EX. 0603E1		

ELECTRICAL:

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	Free Space	3 in G.P. 4 ft G.P.
@ 90° (ZENITH):	+5.0 +4.7	+3.1 +0.7
@ 10° Elevation:	-2.1 -1.8	-1.9 -5.8
@ 20° Elevation:	-0.6 -0.3	+0.6 -4.3
@ 30° Elevation:	+0.9 +1.4	+1.7 -3.4
@ 60-90° Elevation:	> 4.0 > 3.9	> 2.4 > -0.9
@ 90° Elevation:		> 2.7 > 2.2
BEAM WIDTH (3dB):	103 Deg. 114 Deg.	143 Deg. 94 Deg. 106 Deg. 74 Deg.
AXIAL RATIO:	2 dB	
LIGHTNING PROTECTION:	DC GROUNDING	
LNA GAIN:	33 dB	
LNA NOISE FIGURE:	3.0 dB	
LNA P1dB Out:	+13 dBm	
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24V)/<50mA	
REJECTION @ (-50/+50) MHz:	-41 dB / -59 dB	
@ (-100/+100) MHz:	< -65 dB	
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)	

MECHANICAL:

SIZE: DIAMETER: 2.63 In. [66.80 mm]
HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73] (Optional for Passive)

WEIGHT: 4.22 oz. (119 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5441

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

CONNECTOR: TNC BULKHEAD
(OPTION: TNC, SMA, 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

QTY	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REV
1	ADHESIVE GASKET	12345G-3M-2G				3
1	WASHER, LOCK	AN936B816				2
1	HEX NUT, MOUNTING	1/2-20 HEX				1

SIZE: FREQ. BAND: LNA:

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215; L1/L2	A: WITH LNA; A4: WITH 40 DB LNA WITHOUT REJECTION FILTERS
1.8: 1.9" SQ.	15; L1 ONLY	AL: WITH LNA/MITTER
2: 2.6" DIA.		P: WITH-OUT LNA
3: 3.5" DIA.		PL: WITH-OUT LNA and THINNER (HEIGHT = 0.58")
4: MINI ANIRC		A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS SHALL BE IN 16ths UNLESS OTHERWISE SPECIFIED
± 1/64 DECIMALS ± .015 ANGLES ± 1° SURF. FINISH SHALL BE 320
TOLERANCE SURF PER ANS Y14.5
RELIEF ALL BORES
BREAK EXTERNAL EDGES TO 0.015
R1.0 PER DIA. & 0.50
SCREW THREADS PER UNF-3-8879
DAYS ON A COMMON 1/2" DIA.
MACHINED SURFACES 20
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

OUTLINE DRAWING
L1/L2 ACTIVE OR PASSIVE
GPS ANTENNA

DWG NO: 3CVE12G1215A-XTB-1
SCALE: 1/1
SHEET 1 OF 1

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		ACTIVE L1/L2 GPS ANTENNA		
		P/N: 2G1215A-XS-2		
		REV: 0603 VIT, AS EX. 0603E1		

ELECTRICAL:

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
FREQUENCY:		
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	Free Space	3 in G.P. 4 ft G.P.
@ 90° (ZENITH):	+5.0 +4.7	+3.1 +0.7
@ 10° Elevation:	-2.1 -1.8	-1.9 -5.8
@ 20° Elevation:	-0.6 -0.3	+0.6 -4.3
@ 30° Elevation:	+0.9 +1.4	+1.7 -3.4
@ 60-90° Elevation:	> 4.0 > 3.9	> 2.4 > -0.9
@ 90° Elevation:		> 2.7 > 2.2
BEAM WIDTH (3dB):	103 Deg. 114 Deg.	143 Deg. 94 Deg. 106 Deg. 74 Deg.
AXIAL RATIO:	2 dB	
LIGHTNING PROTECTION:	DC GROUNDING	
LNA GAIN:	33 dB	
LNA NOISE FIGURE:	3.0 dB	
LNA P1dB Out:	+13 dBm	
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24V)/<50mA	
REJECTION @ (-50/+50) MHz:	-41 dB / -59 dB	
@ (-100/+100) MHz:	< -65 dB	
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)	

MECHANICAL:

SIZE: DIAMETER: 2.63 In. [66.80 mm]
HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73] (Optional for Passive)

WEIGHT: 4.22 oz. (119 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5441

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

CONNECTOR: TNC BULKHEAD
(OPTION: TNC, SMA, 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

QTY	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REV
1	ADHESIVE GASKET	12345G-3M-2G				3
1	WASHER, LOCK	AN936B816				2
1	HEX NUT, MOUNTING	1/2-20 HEX				1

SIZE: FREQ. BAND: LNA:

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215; L1/L2	A: WITH LNA; A4: WITH 40 DB LNA WITHOUT REJECTION FILTERS
1.8: 1.9" SQ.	15; L1 ONLY	AL: WITH LNA/MITTER
2: 2.6" DIA.		P: WITH-OUT LNA
3: 3.5" DIA.		PL: WITH-OUT LNA and THINNER (HEIGHT = 0.58")
4: MINI ANIRC		A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS SHALL BE IN 16ths UNLESS OTHERWISE SPECIFIED
± 1/64 DECIMALS ± .015 ANGLES ± 1° SURF. FINISH SHALL BE 320
TOLERANCE SURF PER ANS Y14.5
RELIEF ALL BORES
BREAK EXTERNAL EDGES TO 0.015
R1.0 PER DIA. & 0.50
SCREW THREADS PER UNF-3-8879
DAYS ON A COMMON 1/2" DIA.
MACHINED SURFACES 20
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

OUTLINE DRAWING
L1/L2 ACTIVE OR PASSIVE
GPS ANTENNA

DWG NO: 3CVE12G1215A-XTB-1
SCALE: 1/1
SHEET 1 OF 1

P/N: 2G1215A-XTB-1

3. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION

2. MOUNTING HEX NUT AND LOCK WASHER ARE SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

CABLE'S LENGTH	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; RS/R-SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. NO MAG.	M: MCX; MM: MMCX	-2: LUSTER: ESS GRAY #36320 PER FED-STD-595B
N: CABLE LENGTH (IN)	N: N; N2: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: T; TB: TNC; TNC-Bulkhead	-4: LUSTER: LESS BLACK #37038 PER FED-STD-595B