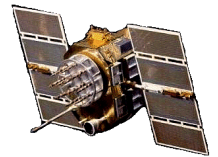




Active or Passive L1/L2 GPS Antennas

P/N: 4G1215X-XX-X

(3.4" x 2.2") Mini Arinc 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>

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REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

	L1: (1575.42 ±15) MHz	L2: (1227.60 ±15) MHz				
FREQUENCY:						
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP	RHCP				
VSWR:	< 1.5:1	< 1.5:1				
IMPEDANCE:	50 ohms	50 ohms				
ANTENNA GAIN (dBic):	Free Space	16 in G.P.	4 ft G.P.	Free Space	16 in G.P.	4 ft G.P.
@ 90° (ZENITH):	+4.6	+0.3	+2.9	+1.8	+1.9	+5.3
@ 10° Elevation:	-2.5	-3.1	-1.8	-4.2	-3.1	-2.3
@ 20° Elevation:	-1.1	-1.1	+0.7	-2.9	-1.1	+0.4
@ 30° Elevation:	+0.5	+0.9	+1.7	-2.0	+0.5	+2.3
@ 60-90° Elevation:	> 3.6	+3.1/+0.3	> 2.1	> 0.9	+3.1/+1.9	> 3.2
BEAM WIDTH (3dB):	103 Deg.	120 Deg.	146 Deg.	108 Deg.	120 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, (2.5-24V)/<50mA					
REJECTION @ (-50/+50) MHz	-41 dB / -59 dB		-40 dB / -40 dB			
REJECTION @ (-100/+100) MHz	< -65 dB		< -65 dB			
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)					

MECHANICAL:

SIZE: WIDTH: 2.20 in. [55.88 mm], LENGTH 3.40 in. [86.36 mm], HEIGHT: 0.72 in. [18.16 mm], 0.61" [15.49] (Optional for Passive)

WEIGHT: 5.15 oz. (146 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 FEMALE (OPTION: SMA, 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

QTY	DESCRIPTION	PART NO	FINISH	REV
4	MOUNTING SCREWS for -PL- ONLY: (10-32, 3/4")	MS24693C274	-	5
4	MOUNTING SCREW: (10-32, 1")	MS24693C276	-	4
				3
				1

DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

SIZE: FREQ. BAND: LNA:

1: 2" SQ. 1215: L1/L2 A: WITH LNA; A4: WITH 40 DB LNA WITHOUT REJECTION FILTERS

1.9: 1.9" SQ. 15: L1 ONLY ALL: WITH LNA/LIMITER

2: 2.6" DIA. P: WITHOUT LNA

3: 3.5" DIA. PL: WITHOUT LNA and THINNER (HEIGHT = 0.61")

4: MINI ARINC A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

QUANTITY REQD **PARTS LIST**

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS AND DECIMALS ANGLES ± 1/64 JOE .015 JOE .005 ± .1"

TOLERANCE 5/16 PER ANSI Y14.5 BREAK EXTERNAL EDGES .000 TO .015 FALTS 1/8 PER FED-STD-899 DATE ON A COMMON 2/2000 MACHINED SURFACES

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

OUTLINE DRAWING L1/L2 ACTIVE, OR PASSIVE GPS ANTENNA

DESIGNED BY: M. BOAS 01-08-01

ENGINEER

APPROVED BY: S. HUYNH 01-08-01

DWG FILE NO

SCALE 1/1

SHEET 1 OF 1

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2. O-RING, AND MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

P/N: 4G1215A-XT-1

CABLES LENGTH :	CONNECTOR :	COLOR :
X: NO CABLE	S: SMA RSR-SMA; P: PINS	1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAC; N: NO MAG	M: MMCX; MM: MMCX	2: LUSTERLESS GRAY #36320 PER FED-STD-595B
F: CABLE LENGTH (IN)	N: NB; N: N-Bulkhead	3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TB; TNC; TNC-Bulkhead	4: LUSTERLESS BLACK #37038 PER FED-STD-595B

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NMO Connector Option is Now Available for Some Antennas