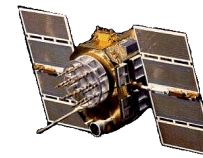




Active L1 GPS Antennas, P/N: 1G15X-XX-X

2.0" Square, Back Mount Configurations



ISO 9001:2008/FAA Approved Facility

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

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2.078 [52.78] SQ.
SPHERICAL R6.000 [R152.40]
R.125 [R3.18]
0.690 [17.53], 0.58 [14.73] (Optional for Passive), -PL-
0.25" [6.37] (MCX/MMCX), 0.46" [11.68] (SMA/R-SMA), 0.57" [14.53] (TNC), 0.83" [21.00] (TNC-BH), 0.72" [18.29] (N, N-BH)
MOUNTING:
4X 4-40 UNF-2A
X 0.155 Deep,
& ADHESIVE GASKET
4X .756 [19.20]
4X .756 [19.20]
.255 [6.48]
SMA FEMALE CONNECTOR
(OPTION: TNC, TNC Bulkhead, N, N-Bulkhead, MCX, MMCX, or Cable)
Clearance Hole: 0.4" Dia. for SMA, MCX, & MMCX Con.
0.52" Dia. for TNC Con.
0.63" Dia. for N Con.

SIZE FREQ BAND ILNA:
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 AL: WITH LNA/LIMITER
2: 2.5" DIA. P: WITHOUT LNA
3: 3.5" DIA. PL: WITHOUT LNA and WITH LIMITER
4: MINI ARINC A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

QUANTITY REQD

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS DECIMALS ANGLES
1/64 .001 ± 1°
300x .005 ± 1°
TOLERANCE SURF PER ANSI Y14.5
DIM OF ALL SURF
BELOW INTERNAL EDGES .005 TO .015
FILLS OF .015 IN Ø
SIZES IN BRACKETS PER MIL-STD-883C
DAYS ON A CONFORM TO 25005
MACHINED SURFACES

DO NOT SCALE DRAWING

SPECIFICATIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

FREQUENCY:	L1: (1575.42±12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
ANTENNA GAIN (dBic):	Free Space 16 in G.P. 4 ft G.P.
@ 90 ° (ZENITH):	+ 5.0 + 2.5 + 3.6
@ 10 ° Elevation:	- 2.3 - 2.9 - 1.7
@ 20 ° Elevation:	- 0.9 - 0.5 + 1.0
@ 30 ° Elevation:	+ 0.7 + 1.6 + 2.4
@ 60 - 90 ° Elevation:	> 4.2 +4.7/+2.5 > 3.6
BEAM WIDTH (3dB):	107 Deg. 127 Deg.
AXIAL RATIO:	2 dB
LIGHTNING PROTECTION:	DC GROUNDING
LNA GAIN (OPTIONAL):	33 dB
LNA NOISE FIGURE:	2.4 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/20mA, 3.3V/20mA, (2.5-24)V/30mA
REJECTION @ (-50/+50) MHz	-45 dB / -70 dB
@ (-100/+100) MHz	< -65 dB

MECHANICAL:

SIZE: LENGTH: 2.080 in. [52.78 mm], WIDTH: 2.080 in. [52.78 mm]
HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73] (Optional for Passive)

WEIGHT: 2.88 oz. (82 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDIUM PER MIL-C-6441

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE PLATE
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, DO-228, MIL-C-5541,
MIL-E-5400, MIL-I-45208A, MIL-STD-883C, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

QTY	DESCRIPTION	PART NO	SPECIFICATIONS	MATERIAL	FINISH	ITEM NO
1	ADHESIVE GASKET	12345G-3M-16				5
1						3
1						2
1						1

ANTCOM CORP. TORRANCE, CALIFORNIA
2in SQUARE ACTIVE L1 GPS ANTENNA

3CVE1 1G15A-XX-X

SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas