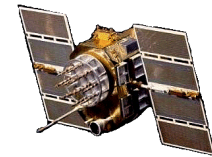




Active or Passive L1/L2 GPS Antennas, P/N: 3G1215AL-MS-3 Rev A

3.5" Diameter Configurations, Flat, Front/Back Magnetic Mount



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

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REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±15) MHz		L2: (1227.60 ±15) MHz			
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):	+4.7	+0.4	+3.5	+3.3	+1.5	+4.9
@ 10° Elevation:	-1.8	-3.2	-2.0	-3.8	-4.0	-3.6
@ 20° Elevation:	-0.3	-1.0	+0.8	-2.0	-2.0	-0.1
@ 30° Elevation:	+1.4	+0.9	+1.8	-0.5	0.0	-1.8
@ 60 - 90° Elevation:	> 3.9	+3.4/+0.4	> 2.8	> 2.7	+2.4/+1.5	> 3.0
BEAM WIDTH (3dB):	114 Deg.	118 Deg.	139 Deg.	106 Deg.	111 Deg.	75 Deg.
AXIAL RATIO:	2 dB		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		< -65 dB			
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)					

MECHANICAL:

SIZE: DIAMETER: 3.53 in. [89 mm]
HEIGHT: 0.76 in. [19 mm]

WEIGHT: 10.8 oz. (306g)

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: 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-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100 2-031/N756-75, or 12345G-3M-3G

4X 0.20 [Ø5.11] Thru. \checkmark Ø.385 [Ø9.78] X 100° for 10-32 MOUNTING SCREWS

SPHERICAL R6.000 [R152.40]

MAGNETIC MOUNT

SMA CONNECTOR (OPTION: TNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, or Cable)

4x 0.190-32 UNC-2B 0.250" Deep, Equally Spaced on 1.375" Rad. for Optional Mounting

SIZE: 1.2" SQ. 1.8x 1.9" SQ. 2" 2.5" DIA. 3" 3.5" DIA. 4" MINI ARINC

FREQ. BAND: 1215; L1/L2 15; L1 ONLY

LNA: A: WITH LNA; A4: WITH 40 DB LNA WITHOUT REJECTION FILTERS ALL WITH LNA LIMITER P: WITHOUT LNA PL: WITHOUT LNA and THINNER (HEIGHT = 0.58") A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

QUANTITY REQUIRED

QTY	DESCRIPTION	PART NO	REV
4	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	5
A/R	WASHER, CUSTOM C'SINK	3G15P1001-6	3
1	EPDM NON-ADHESIVE GASKET	3G15P1001-3G	2
1	ADHESIVE GASKET	12345G-3M-3G	1

PARTS LIST

QTY	DESCRIPTION	PART NO	REV
4	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	5
A/R	WASHER, CUSTOM C'SINK	3G15P1001-6	3
1	EPDM NON-ADHESIVE GASKET	3G15P1001-3G	2
1	ADHESIVE GASKET	12345G-3M-3G	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

FRACTIONS: DECIMALS: ANGLES: ± 1/64 .0005 .005 ± 1°

TOLENCES: DIM PER ANSI Y14.5: BREAK ALL DIMS: BREAK EXTENS. DIMS .005 TO .010: FILED 8: 000 TO 1.0: 0.005: SCREW THREADS PER MIL-C-8839: DIA'S ON A CONICAL & 27: 0.005: MACHINED SURFACES: 12.5

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

MAGNETIC MOUNT L1/L2 ACTIVE, OR PASSIVE GPS ANTENNA

DATE: 30 APR 2015

DESIGNED BY: S. HUYNH

APPROVED BY: S. HUYNH

DATE: APR 27-07

DWG NO: D13CVE1

SCALE: 1/1

SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas