



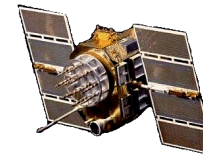
ISO 9001:2008/FAA Approved Facility

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

# Active L1 GPS Antenna

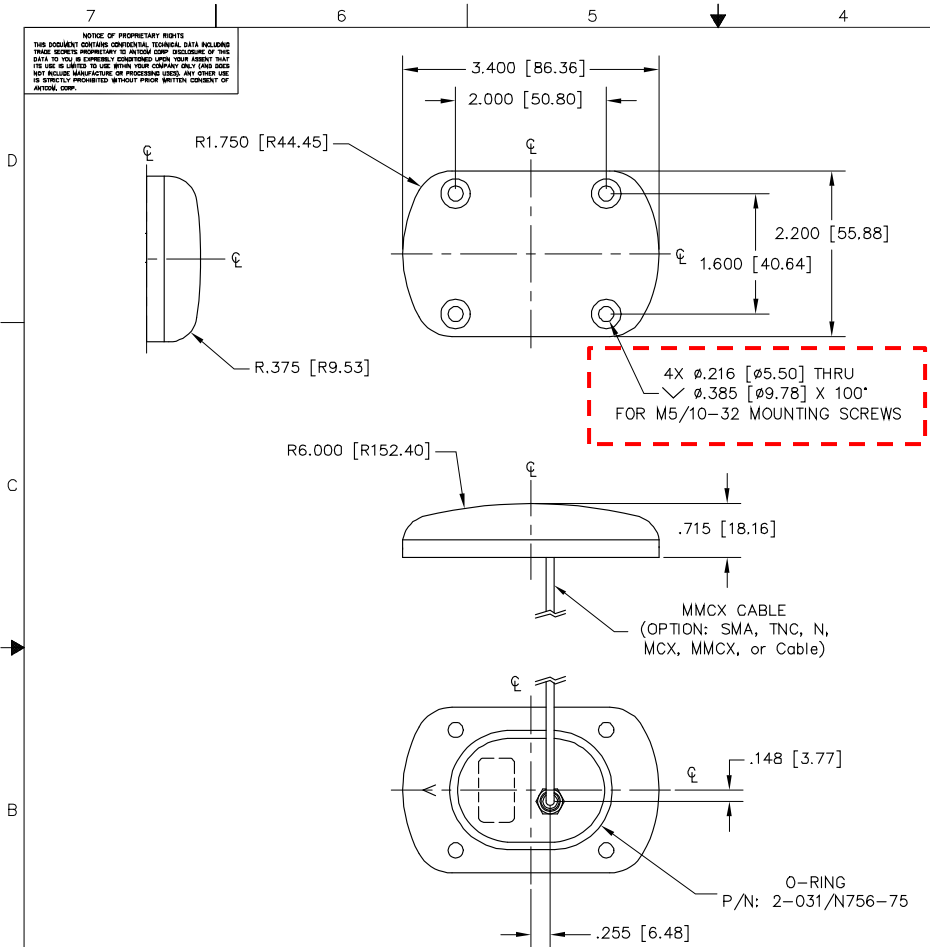
P/N: 4G15A-3MM-5-RoHS Rev C

(3.4" x 2.2") Mini Arinc, M5/10-32 Mounting Configuration



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## SPECIFICATIONS

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	
C		M5 SCREW	09/08/15 S.H.

### ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz		
RADIATION PATTERN:	HEMISPHERICAL		
POLARIZATION:	RHCP		
VSWR:	2:1		
IMPEDANCE:	50 ohms		
ANTENNA GAIN (dBic):	Free Space	16 in G.P.	4 ft G.P.
@ 90 ° (ZENITH):	+ 4.6	+ 0.3	+ 2.9
@ 10 ° Elevation:	- 2.5	- 3.1	- 1.8
@ 20 ° Elevation:	- 1.1	- 1.1	+ 0.7
@ 30 ° Elevation:	+ 0.5	+ 0.9	+ 1.7
@ 60 - 90° Elevation:	> 3.6	+3.1/+0.3	> 2.1
BEAM WIDTH (3dB):	103 Deg.	120 Deg.	146 Deg.
AXIAL RATIO:	2 dB		
LIGHTNING PROTECTION:	DC GROUNDING		
LNA GAIN:	33 dB		
LNA NOISE FIGURE:	2.2 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		
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: 0.715 in. [18.16 mm]
WEIGHT:	5.15 oz. (146g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541
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

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215: L1/L2	A: WITH 33 dB LNA, A2: WITH 20 dB LNA, A4: WITH 40 dB LNA
1.9: 1.9" SQ.	15: L1 ONLY	A2: WITH 20 dB LNA
2: 2.6" DIA.		A4: WITH 40 dB LNA
3: 3.5" DIA.		P: WITHOUT LNA
4: MINI ARINC		

## P/N: 4G15A-XMM-5-RoHS

CABLE'S LENGTH:	FEMALE CONNECTORS:	COLOR:
X: NO CABLE	S: SMA; RS: R-SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N: NO MAG.	M: MMCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
H: CABLE LENGTH (IN)	N: NB; N: N-Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
R: RIGHT ANGLE CON.	T, TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		-5: DESERT TAN #33446 PER FED-STD-595B

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	REV
4	FLATHEAD SCREW, 10-32 X 1"	MS24693C274		4
4	OR FLATHEAD SCREW: M5 X 1"	91801A268		2
1	O-RING	2-031/N756-75		1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 .005 .005 ± 1°	ORIGINALLY DRAWN S. HUYNH July-30-04	<b>ANTCOM CORP.</b> TORRANCE CALIFORNIA OUTLINE DRAWING L1 ACTIVE GPS ANTENNA P/N: 4G15A-XMM-5-RoHS Rev C SCALE 1/1 SHEET 1 OF 1
TOLERANCE .5% PER ANSI Y14.5	ORIGINALLY DESIGNED S. HUYNH July-30-04	
REMOVE ALL BURRS	UPDATED S. HUYNH July-08-15	
BREAK EXTERNAL EDGES .005 TO .015	UPDATE DRAWN P. TRAN July-08-15	
SIZE IF UNLESS PER MIL-C-8878 DIA'S ON A CENTER ± .005	APPROVED S. HUYNH July-08-15	
MACHINED SURFACES	DO NOT SCALE DRAWING	

NOTES: UNLESS OTHERWISE SPECIFIED:

NMO Connector Option is Now Available for Some Antennas