

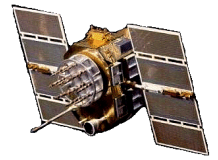


ISO 9001:2008/FAA Approved Facility

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

Active or Passive L1/L2 GPS Antennas

P/N: 3G1215X-MNT-X Rev B2 for TNC Connector, P/N: 3G1215X-XNT-X Rev B2 for No Magnet  
 P/N: 3G1215X-MNS-X Rev B2 for SMA Connector, P/N: 3G1215X-XNS-X Rev B2 for No Magnet  
 3.5" Diameter Configurations, Flat, Front/Back Flush Magnetic Mount



ANTCOM CORPORATION . 367 Van Ness Way, #602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: [antennas@antcom.com](mailto:antennas@antcom.com) . <http://www.antcom.com>

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REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	
B2		Connector Clock Angle	S.H

**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 +2.4/+1.5
BEAM WIDTH (3dB):	114 Deg. 118 Deg. 139 Deg.	106 Deg. 111 Deg. 75 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, (2.5-24)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: 0.888 in [ 22.56 mm]

WEIGHT: <6.8 oz. (191 g) for SMA, < 9.1oz. (217g) for TNC

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 or TNC FEMALE ( See Below Part Number)  
 (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, D0-228, 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 123456-3M-3G

QTY	DESCRIPTION	PART NO	REV
4	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	-
A/R	WASHER, CUSTOM C'SINK	3G15P1001-6	-
1	EPDM NON-ADHESIVE GASKET	3G15P1001-3G	2
1	or ADHESIVE GASKET	123456-3M-3G	1

**QUANTITY REQD PARTS LIST**

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMAL ANGLES ± 1/64 0.005 0.010 0.015 ± .1°	FRAC	DEC
TELEPHONE SNI PER ANS I14.5		
REMOVE ALL BURRS		
BREAK EXTERNAL EDGES .005 TO .010		
DRILL 9 DEG TO 18 DEG		
SCREW THREADS PER MIL-S-8879		
DATE ON A COMPLEX 12/02		
MACHINED SURFACES		
DO NOT SCALE DRAWING		

**P/N: 3G1215A-MNX-X**

CABLE'S LENGTH:	CONNECTOR:	COLOR: -1: GLOSS WHITE #7925 PER FED-STD-595B
X: Bottom Connector	S: SMA; RD: B-SMA; P: PINS	-2: LUSTERLESS GRAY #3820 PER FED-STD-595B
XN: NO MAG	M: MCX; MM: MMCX	-3: OLIVE DRAB #34031 PER FED-STD-595B
MN: FLUSH MAG	T: TNC	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
M: B; Non-Flush Mag.	N: N	-5: DESERT TAN

2. MOUNTING SCREWS & ADHESIVE GASKET ARE SUPPLIED BY ANTCOM

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

NMO Connector Option is Now Available for Some Antennas