


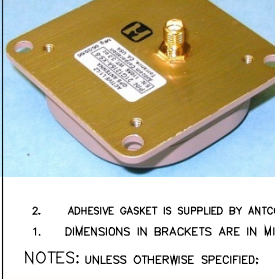
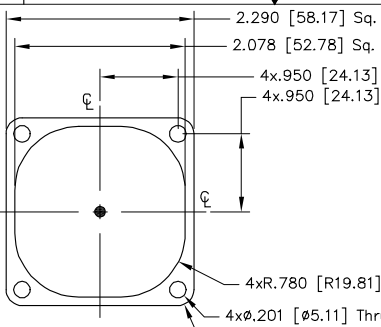
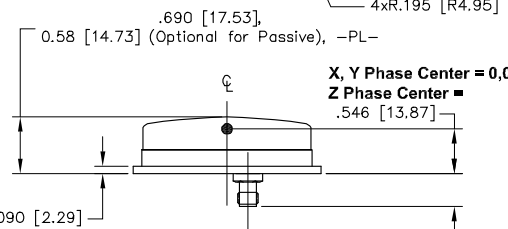
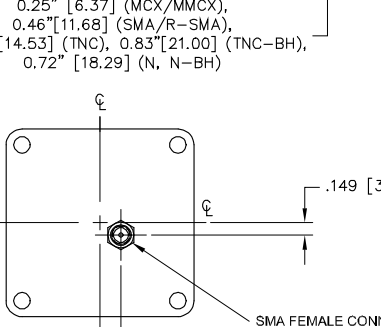


## 2.3" Square, Front Mount Configurations

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](mailto:antennas@antcom.com) . <http://www.antcom.com>

**SPECIFICATIONS**

**ELECTRICAL:**

|                            |   |           |                       |            |           |
|----------------------------|---|-----------|-----------------------|------------|-----------|
| FREQUENCY:                 | L1: (1575.42 ±12) MHz                                 |           | L2: (1227.60 ±12) MHz |            |           |
| RADIATION PATTERN:         | HEMISPHERICAL   |           |                       |            |           |
| POLARIZATION:              | RHCP  |           | RHCP                  |            |           |
| VSWR:                      | < 1.5:1   |           | < 1.5:1               |            |           |
| IMPEDANCE:                 | 50 ohms   |           | 50 ohms               |            |           |
| ANTENNA GAIN (dBic):       | Free Space  | 3 in G.P. | 4 ft G.P.             | Free Space | 3 in G.P. |
| @ 90° (ZENITH):            | + 3.7   | + 4.7     | + 3.1                 | - 1.7      | + 3.3     |
| @ 10° Elevation:           | - 2.9   | - 1.8     | - 1.9                 | - 7.3      | - 3.8     |
| @ 20° Elevation:           | - 1.3   | - 0.3     | + 0.6                 | - 6.2      | - 2.0     |
| @ 30° Elevation:           | 0.0   | + 1.4     | + 1.7                 | - 5.2      | - 0.5     |
| @ 60 - 90° Elevation:      | > 3.0   | > 3.9     | > 2.4                 | > - 3.2    | > 2.7     |
| BEAM WIDTH (3dB):          | 108 Deg.  | 114 Deg.  | 143 Deg.              | 100 Deg.   | 74 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  |           |                       |            |           |
| POWER HANDLING:            | 1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-) |           |                       |            |           |

**MECHANICAL:**

SIZE: LENGTH: 2.290 In. [ 58.17 mm], WIDTH: 2.290 In. [ 58.17 mm]  
 HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73] (Optional for Passive)

WEIGHT: 2.9 oz. (82 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: 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, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

| QTY | DESCRIPTION     | PART NO      | SPECIFICATION | MATERIAL | FINISH | THRU |
|-----|-----------------|--------------|---------------|----------|--------|------|
| 1   | ADHESIVE GASKET | 123456-3M-1G |               |          |        | 5    |
| 1   |                 |              |               |          |        | 3    |
| 1   |                 |              |               |          |        | 2    |
| 1   |                 |              |               |          |        | 1    |

**REVISIONS**

| ZONE | REV | DESCRIPTION | DATE | APPROVED |
|------|-----|-------------|------|----------|
|      |     |             |      |          |

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**SIZE:** FREQ. BAND: LNA:  
 1: 2" SQ. 1215; L1/L2 A: WITH LNA; A4: WITH 40 DB LNA WITHOUT REJECTION FILTERS  
 1.8: 1.9" SQ. 18: L1 ONLY AL: WITH LNA/LIMITER  
 2: 2.6" DIA. P: WITHOUT LNA  
 3: 3.5" DIA. PL: WITH-OUT LNA and THINNER (0.58" THICK)  
 4: MINI ARINC A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

**CABLE'S LENGTH:** CONNECTOR: COLOR:  
 X: NO CABLE S: SMA; P: PINS -1: GLOSS WHITE #17925 PER FED-STD-595B  
 M: MAG. N: NO MAG. M: MCX/MMC M: MMCX -2: LUSTERLESS GRAY #36320 PER FED-STD-595B  
 R: CABLE LENGTH (IN) N: N; N: N-Bulkhead -3: OLIVE DRAB GREEN #34031 PER FED-STD-595B  
 R: RIGHT ANGLE CON. T, T: TNC, TNC-Bulkhead -4: LUSTERLESS BLACK #37038 PER FED-STD-595B  
 -5: DESERT SAND

**UNLESS OTHERWISE SPECIFIED**  
 DIMENSIONS ARE IN INCHES  
 FRACTIONS DECIMALS ANGLES  
 ± 1/64 ± .005 ± 1°  
 TOLERANCE SURF PER ANSI Y14.5  
 REMOVE ALL BURRS  
 BREAK EXTERNAL EDGES .005 TO .015  
 SAFETY HEADS PER MIL-STD-8879  
 DIM'S ON A DIMENSION < 2" .005  
 MACHINED SURFACES  
 DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE, CALIFORNIA  
 OUTLINE DRAWING  
 L1/L2 ACTIVE or PASSIVE  
 GPS ANTENNA  
 D3CVE1 21G1215X-XX-X  
 SCALE 1/1 SHEET 1 OF 1

2. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

NMO Connector Option is Now Available for Some Antennas