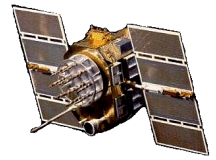




Passive L1/L2 GPS Antenna, P/N: 1.9G1215X-XRS-4 Rev D (380-232-5005)

Low Profile 1.9" Square, Flat/Back Mount Configuration

Suitable for Forming Multiple Element CRPA



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 . <http://www.antcom.com>

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4xR.72 [R18.19]
1.91 [48.56] SQ.
1.95 [49.58] SQ.
.37 [9.40]
1.95 [49.58]
1.91 [48.56]
0.10" (PIN), 0.25" [6.37] (MCX/MMCX), .53 [13.46] (SMA/R-SMA), 0.57" [14.53] (TNC), 0.83" [21.00] (TNC-BH), 0.72" [18.29] (N, N-BH)

1.91 [48.56]
0.15 [3.77]
MOUNTING: ADHESIVE
SMA Right Angle Female Con. (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.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
± 1/64 .XXX± .020 ± 1°
.XXX± .010

P/N: 1.9G1215P-XRS-4

| SIZE: | FREQ. BAND: | LNA: |
|---------------|-------------|---|
| 1: 2" SQ. | 1215: L1/L2 | A2: WITH 20 dB LNA |
| 1.9: 1.9" SQ. | 15: L1 ONLY | A4: WITH 40 dB LNA |
| 2: 2" DIA. | | P: WITHOUT LNA |
| 3: 3.5" DIA. | | P2: WITHOUT LNA, WITH RHCP/LHCP POLARIZATION |
| 4: MINI ARINC | | P2L: WITHOUT LNA, WITH DUAL LINEAR POLARIZATION |

| CABLE'S LENGTH: | CONNECTOR: | COLOR: |
|----------------------|--------------------------|--|
| X: NO CABLE | S: SMA; P: P2; PINS | -1: GLOSS WHITE #17925 PER FED-STD-595B |
| M: MAG. N: NO MAG | M: MCX; MM: MMCX | -2: LUSTERLESS GRAY #36320 PER FED-STD-595B |
| #: CABLE LENGTH (IN) | N: NB: RS: R-SMA | -3: OLIVE DRAB GREEN #34031 PER FED-STD-595B |
| R: RIGHT ANGLE CON. | T, TB: TNC, TNC-Bulkhead | -4: LUSTERLESS BLACK #37038 PER FED-STD-595B |

2. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

1

SPECIFICATIONS

| REVISIONS | | DATE | APPROVED |
|-----------|-----|-----------------|---------------|
| ZONE | REV | DESCRIPTION | |
| C | | 0.010in THICKER | FEB/08/07 S.H |

ELECTRICAL:

| | | | | | | |
|-----------------------|----------------------|----------------------|-----------|------------|-----------|-----------|
| FREQUENCY: | L1: (1575.42±12) MHz | L2: (1227.60±12) MHz | | | | |
| RADIATION PATTERN: | HEMISPHERICAL | | | | | |
| POLARIZATION: | 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. | 4 ft G.P. |
| @ 90° (ZENITH): | +2.7 | +3.1 | +1.5 | +3.3 | +4.5 | |
| @ 10° Elevation: | -4.4 | -1.8 | -1.9 | -6.7 | -3.8 | -3.5 |
| @ 20° Elevation: | -2.3 | -0.3 | +0.6 | -5.6 | -2.0 | -0.8 |
| @ 30° Elevation: | -0.8 | +1.4 | +1.7 | -4.5 | -0.5 | +1.4 |
| @ 60 - 90° Elevation: | > 2.0 | > 3.9 | > 2.4 | > 0.0 | > 2.7 | > 2.2 |
| BEAM WIDTH (3dB): | 113 Deg. | 114 Deg. | 143 Deg. | 85 Deg. | 106 Deg. | 74 Deg. |
| AXIAL RATIO: | 2 dB | | 2 dB | | | |
| LIGHTNING PROTECTION: | DC GROUNDING | | | | | |

LNA OPTION:

LNA GAIN: (21.0+/-2.0) dB
LNA NOISE FIGURE: 1.8 dB
LNA P 1dB Out: +16 dBm
VOLTAGE/CURRENT: (+2.8 TO +28) Volts DC / (15 TO 25) mA

MECHANICAL:

SIZE: 1.91 in. [48.6mm] SQ.
HEIGHT: 0.37in [9.4 mm]
WEIGHT: 2.1 oz. (59 g)
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE THERMOSET PLASTIC RADOME, UV, ABRASION AND SKYDROL RESISTANCE
CONNECTOR: SMA RIGHT ANGLE FEMALE (OPTION: SMA, TNC, TNC-Bulkhead, N, N-Bulkhead, MCX, MMCX, or Cable)

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE: 70,000ft.
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 AND MIL-STD-810

| 1 | ADHESIVE GASKET | 12345C-3M-1G | - | - | - | 1 |
|---------------|-----------------|--------------|---------------|----------|--------|---------|
| QUANTITY REQD | DESCRIPTION | PART NO | SPECIFICATION | MATERIAL | FINISH | ITEM NO |
| | | | | | | |

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± 1/64 .XXX± .010 ± 1°

REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILLETS R .005 TO R .030
SCREW THREADS PER MIL-S-8879
DIA'S ON A COMMON & .005

MACHINED SURFACES ✓

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

1.9" SQUARE, L1/L2 PASSIVE GPS ANTENNA

DRAWN: []
CHECKED: []
ENGINEER: []
APPROVED: S. HUYNH Sep-19-01
CAD FILE NO: []

SCALE 1/1 SHEET 1 OF 1

P/N: 1.9G1215P-XRS-4