



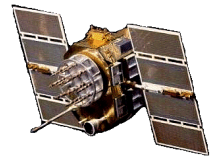
ISO 9001:2008/FAA Approved Facility

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

Dual Polarization (RHCP/LHCP) L1/L2GPS Antenna

P/N: 1.9G1215RL-PP-XRS-X Rev B

1.9" Square Configurations with Back Mounting Option



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SIZE: 1: 2" SQ
1.9: 1.9" SQ.
2: 2.6" DIA
3: 3.5" DIA
4: MINI ARINC

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

POLARIZATION: RL: RHCP/LHCP
VL: VERT/HOR

LNA: A: WITH LNA
AL: WITH LNA/LIMITER
P: WITHOUT LNA
PL: WITHOUT LNA and THINNER (HEIGHT = 0.58")

CONNECTOR: S: SMA; RS: SMA-R; P: PINS
M: MCX; MM: MMCX
N, NB: N, N-Bulkhead
T, TB: TNC, TNC-Bulkhead

COLOR:
-1: GLOSS WHITE #17925 PER FED-STD-595B
-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

SPECIFICATIONS

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

ELECTRICAL:

| | L1: (1575.42±12) MHz | | | L2: (1227.60±12) MHz | | |
|-----------------------|----------------------|-----------|-----------|----------------------|-----------|-----------|
| FREQUENCY: | | | | | | |
| RADIATION PATTERN: | HEMISPHERICAL | | | | | |
| POLARIZATION: | RHCP/LHCP | | | | | |
| 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 | +4.7 | +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: 1.912 in. [48.56mm] SQ.
HEIGHT: 0.36 in. [9.02 mm]
WEIGHT: 2.3 oz. (65 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: 0.030" DIA. PIN, 0.100" LONG (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: 70,000 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 AND MIL-STD-810

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
FRACTIONS TOLERANCES ARE DECIMALS ANGLES ± 1/64 .XXX ± 1°
TOLERANCE SYM PER ANSI Y14.5
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 & Z .005
MACHINED SURFACES ✓
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

1.9" SQUARE, L1/L2 PASSIVE RHCP/LHCP GPS ANTENNA

SIZE: 3C
GAGE NO: VE1
DRAWING NO: 1.9G1215RL-PP-XRS-4
REV: B
SCALE: 1/1
SHEET: 1 OF 1

NMO Connector Option is Now Available for Some Antennas