

# GPS/RHCP-Inmarsat/Iridium Antennas, P/N: 1G1216P-XX-X or LHCP-Thuraya only Antennas, P/N: 1T1516P-XX-X

## 2.0" Square, Flat, Back Mount, Bottom Connector Configurations

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

ANTCOM CORPORATION . 367 Van Ness Way, Suite 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>

**NOTICE OF PROPRIETARY RIGHTS**  
THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION. ANY REPRODUCTION OR DISSEMINATION OF THIS DOCUMENT WITHOUT THE WRITTEN CONSENT OF ANTCOM CORPORATION IS PROHIBITED.

**ELECTRICAL:**

|                       | L1/L2 GPS                  |                   |                   |                 | Rx/Tx INMARSAT/GLONASS/IRIDIUM |                 |                   |
|-----------------------|----------------------------|-------------------|-------------------|-----------------|--------------------------------|-----------------|-------------------|
| FREQUENCY (MHz):      | L1: (1575.42 ±12)          | L2: (1227.60 ±12) | (1542.50 ±17.5)   | (1642.50 ±17.5) | (1602-1626)                    |                 |                   |
| ANTENNA GAIN (dBic):  | 3.5" Dia. GP +5.5          | 4 ft G.P. +4.5    | 3.5" Dia. GP +3.5 | 4 ft G.P. +4.9  | 3.5" Dia. GP +3.1              | Free Space +3.4 | 3.5" Dia. GP +4.3 |
| @ 90° (ZENITH):       | -1.2                       | -1.4              | -3.8              | -3.6            | -3.7                           | -3.1            | -2.2              |
| @ 10° Elevation:      | +0.3                       | +1.4              | -2.0              | -0.1            | -2.0                           | -1.1            | -0.6              |
| @ 20° Elevation:      | +1.8                       | +2.2              | -0.5              | -1.8            | -1.3                           | 0.0             | +0.8              |
| @ 30° Elevation:      | >4.8                       | >3.8              | >2.7              | >3.0            | >2.0                           | >+2.6           | >+3.5             |
| @ 60-90° Elevation:   |                            |                   |                   |                 |                                |                 |                   |
| BEAM WIDTH (3dB):     | 106 Deg.                   | 130 Deg.          | 106 Deg.          | 75 Deg.         | 106 Deg.                       | 106 Deg.        | 106 Deg.          |
| RADIATION PATTERN:    | HEMISPHERICAL              |                   |                   |                 |                                |                 |                   |
| POLARIZATION:         | RHCP                       |                   |                   |                 |                                |                 |                   |
| VSWR:                 | < 1.5:1                    |                   |                   |                 |                                |                 |                   |
| IMPEDANCE:            | 50 ohms                    |                   |                   |                 |                                |                 |                   |
| AXIAL RATIO:          | 2 dB                       |                   |                   |                 |                                |                 |                   |
| LIGHTNING PROTECTION: | DC GROUNDING               |                   |                   |                 |                                |                 |                   |
| POWER HANDLING:       | 200 Watts CW (WITHOUT LNA) |                   |                   |                 |                                |                 |                   |

**MECHANICAL:**

SIZE: LENGTH: 2.080 in. [ 52.78 mm], WIDTH: 2.080 in. [ 52.78 mm]  
HEIGHT: 0.657 in. [16.69 mm] , .499 in. [12.67mm] (No Radome option)

WEIGHT: 2.88 oz. (82 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
BASE IRIDITE PER MIL-C-5441

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
COMPOSITE RADOME, IMPACT, ABRASION, 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 SEALED

**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 MIL-E J1455

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

**REVISIONS**

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

**PARTS LIST**

| QTY | DESCRIPTION     | PART NO      |
|-----|-----------------|--------------|
| 1   | ADHESIVE GASKET | 123456-3M-1G |
| 1   |                 |              |
| 1   |                 |              |
| 1   |                 |              |
| -2  |                 |              |

**UNLESS OTHERWISE SPECIFIED**

FRACTIONS: DECIMALS: ANGLES: ± 1/64 ± .005 ± 1°

TOLERANCE DIM PER ANSI Y14.5

REMOVE ALL BURRS

MEASUREMENTS TO CENTER UNLESS OTHERWISE SPECIFIED

PLATE & DIM TO CENTER UNLESS OTHERWISE SPECIFIED

DATE ON A CONTROL SHEET

MACHINED SURFACES

DO NOT SCALE DRAWING

**CABLE'S LENGTH:** X: NO CABLE M: MAG. N: No Radome #: CABLE LENGTH (IN) R: RIGHT ANGLE CON.

**CONNECTOR:** S: SMA, P: PINS N: 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

NMO Connector is Now Available for Some Antennas