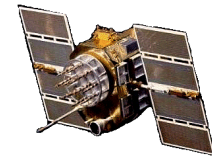




# L1 GPS/Iridium/Tx Inmarsat Antenna, P/N: 0.7R1216X-6MM-4

## 0.5" Diameter x 4.4" Tall, Threaded Bottom Mount Configuration



ISO 9001:2008/FAA Approved Facility    Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

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### SPECIFICATIONS

| ELECTRICAL:              | REVISIONS     |                 |                 |             |             |
|--------------------------|---------------|-----------------|-----------------|-------------|-------------|
|                          | ZONE          | REV             | DESCRIPTION     | DATE        | APPROVED    |
| FREQUENCY (MHz):         | (1575.42 ±15) | (1542.50 ±17.5) | (1642.50 ±17.5) | (1602-1616) | (1610-1626) |
| GAIN in FS/3in GP (dBic) | L1 GPS        | Rx INMARSAT     | Tx INMARSAT     | GLONASS     | IRIDIUM     |
| @ 90° (Zenith):          | -1.6          | -2.9            | +0.1            | +0.5        | +0.5        |
| @ 10° Elevation:         | -4.5          | -6.0            | -2.1            | -2.0        | -2.0        |
| @ 20° Elevation:         | -3.5          | -5.0            | -1.1            | -0.9        | -0.9        |
| @ 30° Elevation:         | -2.8          | -4.2            | -0.7            | -0.3        | -0.3        |
| @ 45° Elevation:         | -2.3          | -3.5            | -0.2            | +0.3        | +0.3        |
| @ 70° Elevation:         | -1.8          | -3.0            | -0.4            | +0.2        | +0.2        |
| BEAM WIDTH (3dB)         | 152 Deg.      | 150 Deg.        | 170 Deg.        | 160 Deg.    | 160 Deg.    |
| AXIAL RATIO (dB)         | 1 to 3        | 1 to 3          | 1 to 3          | 1 to 3      | 1 to 3      |
| RADIATION PATTERN:       | HEMISPHERICAL |                 |                 |             |             |
| POLARIZATION:            | RHCP          |                 |                 |             |             |
| VSWR:                    | < 2.0:1       |                 |                 |             |             |

**LNA OPTION for GPS:**

LNA GAIN: (27.0+/-2.0)dB  
LNA NOISE FIGURE: <1.4 dB  
LNA P 1dB Out: +13 dBm  
VOLTAGE/CURRENT: (3-10) Volts/ 20mA

**MECHANICAL:**

SIZE: DIAMETER: 0.50 in. [ 12.70 mm]  
HEIGHT: 3.862 in. [98.09 mm]  
WEIGHT: < 2.8 oz (79.4 g)  
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
BASE IRIDITE PER MIL-C-5441  
COLOR: OLIVE DRAB GREEN #34031 PER FED-STD-595B  
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,  
SKYDROL RESISTANCE, AND FIRE RETARDANT  
CONNECTOR: MMCX RIGHT ANGLE MALE WITH 7" LONG CABLE  
(OPTION: MCX, 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 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 SAE J1455

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

| CONFIGURATION:            | FREQUENCY:             | LNA:           | CABLE'S LENGTH :     | CONNECTOR :              | COLOR :                                      |
|---------------------------|------------------------|----------------|----------------------|--------------------------|--|
| 1: 2" SQ. (FLAT)          | 1216: L1/L2/Inmarsat   | A1: WITH LNA   | X: NO CABLE          | S: SMA; P: PINS          | -1: GLOSS WHITE #17925 PER FED-STD-595B      |
| 1.9: 1.9" SQ. (FLAT)      | 1215: L1/L2            | P: WITHOUT LNA | M: WITH MAG. MOUNT T | M: MCX; MM: MMCX         | -2: LUSTERLESS GRAY #36320 PER FED-STD-595B  |
| 2: 2.6" DIA. (FLAT)       | 15: L1                 |                | #: CABLE LENGTH (IN) | N: N; NB: N-Bulkhead     | -3: OLIVE DRAB GREEN #34031 PER FED-STD-595B |
| 3: 3.5" DIA. (FLAT)       | RR: TX: RHCP, RX: RHCP |                | R: RIGHT ANGLE CON.  | T: TNC; TB: TNC-Bulkhead | -4: LUSTERLESS BLACK #37038 PER FED-STD-595B |
| 0.5R: 0.5" Dia. Helix Rod |                        |                |                      |                          |  |
| 53: (HELIX ROD)           |                        |                |                      |                          |  |
| 5B: (HELIX BLADE)         |                        |                |                      |                          |  |
| 3D: (HELIX HANDHELD)      |                        |                |                      |                          |  |

| QUANTITY | UNIT | DESCRIPTION | PART NO | MATERIAL | FINISH | REV |
|----------|------|-------------|---------|----------|--------|-----|
| 1        | 1    |             |         |          |        | 1   |
| -2       | -1   |             |         |          |        |     |

**PARTS LIST**

|   |        |  |  |
|---|--------|--|--|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES |        | <b>ANTCOM CORP.</b> TORRANCE CALIFORNIA                    |  |
| FRONTS UNLESS OTHERWISE SPECIFIED                   | ANGLES | <b>HANDHELD L1/L2 GPS/INMARSAT/GLONASS/IRIDIUM ANTENNA</b> |  |
| ± 1/64  | ± 1°   |  |  |
| ± 1/32  | ± 1/2° |  |  |
| ± 1/16  | ± 1/4° |  |  |
| TOLERANCE 5/16 PER ANSI Y14.5                       |        | DESIGN   |  |
| REMOVE ALL BURRS                                    |        | CHECKED  |  |
| BREAK EXTERNAL EDGES 0.010 TO .015                  |        | DRAWN  |  |
| FLATTEN 1/32 TO 1/16 DIA.                           |        | APPROVED   |  |
| DRILL THROUGH PER MIL-STD-883C                      |        | S. HUYNH   |  |
| DRILL ON A COMB 8 2/32                              |        | Feb-23-04  |  |
| MACHINED SURFACES                                   |        | DATE   |  |
|   |        | DO NOT SCALE DRAWING                                       |  |

NOTES: UNLESS OTHERWISE SPECIFIED:  
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]  
2. ALL SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

**P/N: 0.7R1216P-7MM-4**

NMO Connector Option is Now Available for Some Antennas