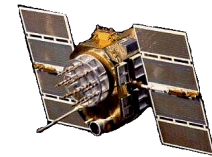




ISO 9001:2008/FAA Approved Facility

L1/L2/L5 GPS & Inmarsat/Iridium+L1/L2 Glonass Antennas, P/N: 6DG5A-XTM-1-PCL  
 Rx Only Thuraya Antenna, P/N: 3DRxTA-XTM-1-PCL  
 Rx Only Inmarsat/Iridium Antenna, P/N: 3DRxINA-XTM-1-PCL  
 Passive Rx/Tx Thuraya Antenna, P/N: 3DRxTxTP-XTM-1-PCL  
 Passive Rx/Tx Inmarsat/Iridium Antenna, P/N: 3DRxTxINP-XTM-1-PCL  
 1" Dia. X 6.5" Tall, Swivel, Side Mount Configurations



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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**ELECTRICAL SPECIFICATIONS**

| FREQUENCY (MHz):   | (1575.42 ±13) | (1542.50 ±17.5) | (1642.50 ±17.5) | (1602-1616) | (1616-1626) | (1227.60 ±13)     | (1252.50 ±7.5)/<br>(1176.45 ±12) |
|--------------------|---------------|-----------------|-----------------|-------------|-------------|-------------------|----------------------------------|
| GAIN (dBic)        | L1 GPS        | Rx INMARSAT     | Tx INMARSAT     | GLONASS     | IRIDIUM     | L2 GPS            | L2 GLONASS/<br>L5 GPS            |
| @ 90° (Zenith):    | +2.9          | +0.7            | -1.6            | +0.3        | -1.2        | 0.0               | -1.0                             |
| @ 10° Elevation:   | -0.4          | -2.8            | -4.9            | -3.1        | -4.3        | -2.4 to -6.3      | -3.4 to -7.3                     |
| @ 20° Elevation:   | +0.5          | -1.7            | -3.5            | -1.7        | -3.0        | -1.8 to -4.8      | -2.8 to -5.8                     |
| @ 30° Elevation:   | +1.7          | -0.7            | -2.4            | -0.7        | -1.9        | -1.3 to -3.4      | -2.3 to -4.4                     |
| @ 45° Elevation:   | +2.4          | +0.2            | -2.3            | -0.1        | -1.8        | -0.5 to -1.5      | -1.5 to -2.5                     |
| @ 70° Elevation:   | +2.3          | +0.6            | -2.1            | +0.2        | -1.6        | 0.0 to -0.5       | -1.0 to -1.5                     |
| BEAM WIDTH (3dB)   | 142 Deg.      | 140 Deg.        | 146 Deg.        | 144 Deg.    | 145 Deg.    | (120 to 165) Deg. | (120 to 165) Deg.                |
| AXIAL RATIO (dB)   | 1 to 3        | 1 to 4          | 1 to 3          | 1 to 4      | 1 to 3      | 1 to 5            | 1 to 5                           |
| RADIATION PATTERN: | HEMISPHERICAL |                 |                 |             |             |                   |                                  |
| POLARIZATION:      | RHCP          |                 |                 |             |             |                   |                                  |
| VSWR:              | < 1.5:1       |                 |                 |             |             |                   |                                  |

**DC GROUNDING:** YES (LIGHTNING PROTECTION)

**LNA OPTION:**

LNA GAIN: (22.0+/-2.0) dB  
 LNA NOISE FIGURE: 2.8 dB (Filter loss is Included)  
 LNA P 1dB Out: +13 dBm  
 VOLTAGE/CURRENT: (+2.4 TO +5) Volts DC / (15 TO 30) mA  
 REJECTION: 2 2-POLE FILTERS FOR EACH BAND

**MECHANICAL:**

SIZE: DIAMETER: 1.00 in. [ 25.40 mm]  
 HEIGHT: 6.5 in. [106.68 mm]  
 WEIGHT: 2.39 oz (67.76 g)  
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
 BASE IRIDITE PER MIL-C-5441  
 COLOR: WHITE #17925 PER FED-STD-595B  
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT  
 CONNECTOR: TNC MALE  
 (OPTION: MCX, SMA, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, QMA, 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

| FREQ. BAND:                           | LNA:           | QUANTITY | REQD | DESCRIPTION | PART NO | SPECIFICATION | MATERIAL | FINISH | TEMP |
|---------------------------------------|----------------|----------|------|-------------|---------|---------------|----------|--------|------|
| 1215: L1/L2                           | A: WITH LNA    | 1        | 1    |             |         |               |          |        | 1    |
| 15: L1 ONLY                           | P: WITHOUT LNA | -2       | -1   |             |         |               |          |        |      |
| 1216: L1/L2/INMARSAT/GLONASS/IRIDIUM  |                |          |      |             |         |               |          |        |      |
| 5: L1/L2/GPS/GLONASS/INMARSAT/IRIDIUM |                |          |      |             |         |               |          |        |      |

**P/N: 6DG5A-XTM-1-PCL**

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

**CONNECTOR:**  
 S: SMA; 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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES TOLERANCE ± 1/64 .015 .0024 .005

RELIEVE ALL SHARP EDGES EXTERNAL EDGES .005 TO .015 FILLS TO .005 TO .010 SREW THREADS PER MIL-S-8879 DITS ON A CONFORM TO 2000 MACHINED SURFACES

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE CALIFORNIA

HANDHELD L1/L2/L5 GPS/INMARSAT/GLONASS/IRIDIUM HELIX ANTENNA

DATE: Mar-01-12  
 DRAWN: [Signature]  
 ENGINEER: [Signature]  
 APPROVED: S. HUYNH  
 CAP FILE NO: [Signature]

SHEET 1 OF 1

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

NMO Connector Option is Now Available for Some Antennas