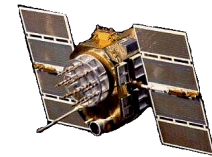




# GPS/Iridium/Inmarsat Antenna, P/N: 0.7R1216X-6MM-4

## 0.5" Diameter x 4.4" Tall Configuration



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](mailto:antennas@antcom.com) . <http://www.antcom.com>

### SPECIFICATIONS

**ELECTRICAL:**

	(1575.42 ±13) L1 GPS	(1542.50 ±17.5) Rx INMARSAT	(1642.50 ±17.5) Tx INMARSAT	(1602-1616) GLONASS	(1616-1626) IRIDIUM	(1227.60 ±13) L2 GPS
FREQUENCY (MHz):						
GAIN (dBic)	IN FREE SPACE / ON 3.5" Dia. BASE PLATE					
@ 90° (Zenith):	+1.7/+1.0	+1.6/0.0	+2.3/-1.2	+2.1/+0.3	+1.6/-0.8	-6.0
@ 10° Elevation:	-2.9/+0.3	-3.0/-0.8	-1.4/-0.7	-1.8/+0.5	-2.0/-0.4	-8.5 to -13.5
@ 20° Elevation:	-1.1/+1.2	-1.3/+0.2	0.0/+0.1	-0.3/+1.3	-0.7/+0.4	-8.2 to -11.2
@ 30° Elevation:	+0.4/+1.8	+0.2/+1.0	+1.3/+0.4	+0.9/+1.4	+0.6/+0.7	-7.7 to -9.7
@ 45° Elevation:	+1.2/+1.9	+1.2/+1.0	+1.7/+0.4	+1.4/+1.6	+1.0/+0.6	-6.6 to -8.0
@ 70° Elevation:	+1.6/+1.5	+1.6/+0.4	+2.0/-1.0	+1.9/+0.8	+1.3/-0.2	-6.0
3dB BEAM WIDTH (Deg.)	133/177	131/175	142/180	137/180	139/182	107/170
AXIAL RATIO (dB)	1 to 3	1 to 4	1 to 3	1 to 3	1 to 3	1 to 5
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP					
VSWR:	< 2.0:1					

**POWER HANDLING:** 10 Watts (without GPS LNA)

**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		F: 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)					

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

QUANTITY	DESCRIPTION	PART NO.	MATERIAL	FINISH	UNIT
1					1
-2					

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

FRONTS: DIMENSIONS AND ANGLES ± 1/64  
 SIDES: ± 0.015  
 HOLES: ± 0.010

TOLERANCE 500 PER ANSI Y14.5

REMOVE ALL BURRS

BREAK EXTERNAL EDGES AND TO .015

FLAT TO .002 TO .004

ROUNDED SURFACES PER MIL-STD-883C

DATE ON A COMBINATION OF 2/2/00

MACHINED SURFACES

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE, CALIFORNIA

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

APPROVED: S. HUYNH Feb-23-04

SCALE 1/1

SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas