



ISO 9001:2008/FAA Approved Facility

# IRIDIUM Antenna, P/N: 0.7R1216X-6MM-4

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



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SPECIFICATIONS		REVISIONS			
ZONE	REV	DESCRIPTION	DATE	APPROVED	
ELECTRICAL:					
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.	1 to 3	1 to 3
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		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: RHC P		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	UNIT	DESCRIPTION	PART NO	MATERIAL	FINISH	REV
1	1					1
-2	-1					

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ± 1/64 DECIMALS ± 1° ANGLES ± 1/64 DECIMALS ± 1/64 ANGLES ± 1° UNLESS OTHERWISE SPECIFIED TOLERANCES ARE PER ASH T16.0  
 REWORK ALL SURFACES BEHIND EXTERNAL EDGES AND TO .015  
 FINISH TO .002 TO .004  
 SURFACE TOLERANCE PER MIL-STD-883C-209  
 DATE ON A COUSIN 8/27/00  
 MACHINED SURFACES

ANTCOM CORP. TORRANCE, CALIFORNIA  
 HANDHELD L1/L2 GPS/INMARSAT/GLONASS/IRIDIUM ANTENNA  
 D3CVE1 0.7R1216X-6MM-4  
 SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas