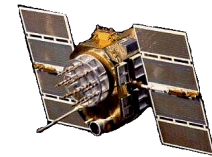




ISO 9001:2008/FAA Approved Facility

Iridium/Inmarsat/L1GPS Antennas, P/N: 3D16RR-P-XXT-X
 Iridium/Inmarsat/L1/L2 GPS Antennas, P/N: 3D1216RR-P-XXT-X
 Rx Only Thuraya Antenna, P/N: 3DRxT-P-XXT-X
 Rx Only Inmarsat/Iridium Antenna, P/N: 3DRxIN-P-XXT-X
 Rx/Tx Thuraya Antenna, P/N: 3DRxTxT-P-XXT-X
 Rx/Tx Inmarsat/Iridium Antenna, P/N: 3DRxTxIN-P-XXT-X
 1" Diameter x 4.2" Tall, 1in Dia. Pipe Mount Configurations

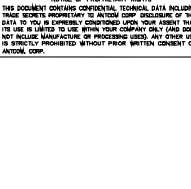



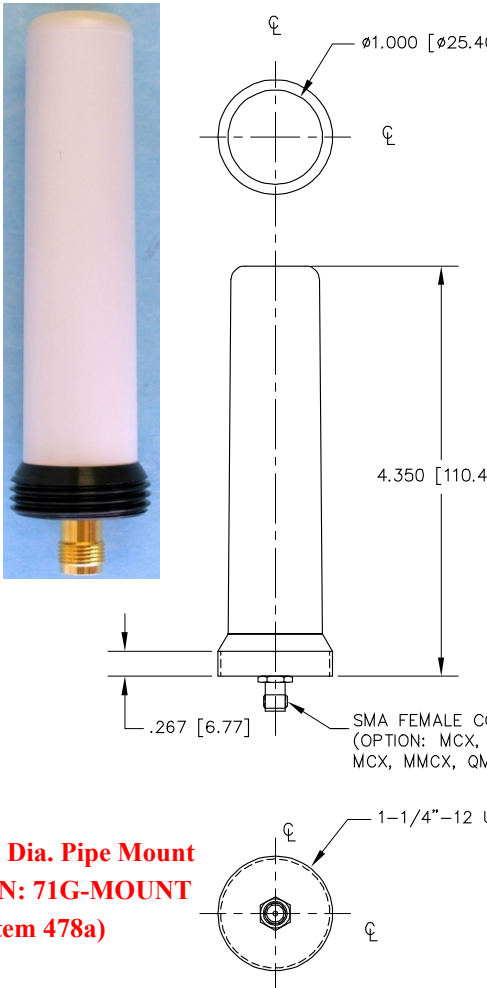
ANTCOM CORPORATION . 367 Van Ness Way, #602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . http://www.antcom.com

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REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED



Ø1.000 [Ø25.40]

4.350 [110.49]

.267 [6.77]

1-1/4"-12 UNF THREAD

SMA FEMALE CONNECTOR
(OPTION: MCX, SMA, TNC, N, MCX, MMCX, QMA, or Cable)

SPECIFICATIONS

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):	+1.4/+1.1	+1.1/+0.7	+0.1/-0.3	+1.0/+0.5	+0.5/+0.1
@ 10° Elevation:	-1.5/-0.9	-2.0/-1.6	-2.1/-1.9	-1.7/-1.3	-2.0/-1.6
@ 20° Elevation:	-0.5/-0.2	-1.0/-0.8	-1.1/-1.1	-0.6/-0.5	-0.9/-0.8
@ 30° Elevation:	+0.2/+0.3	-0.2/-0.2	-0.7/-0.8	0.0/+0.1	-0.3/-0.7
@ 45° Elevation:	+0.7/+0.6	+0.5/+0.3	-0.2/-0.7	+0.5/-0.1	+0.3/-0.3
@ 70° Elevation:	+1.2/+0.3	+1.0/+0.3	-0.4/-1.6	+0.7/-0.3	+0.2/-0.7
BEAM WIDTH (3dB)	152/173 Deg.	150/173 Deg.	170/180 Deg.	160/180 Deg.	160/182 Deg.
AXIAL RATIO (dB)	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3
LIGHTNING PROTECTION:	DC GROUNDING				
RADIATION PATTERN:	HEMISPHERICAL				
POLARIZATION:	RHCP				
VSWR:	< 1.5:1				

LNA OPTION:

LNA GAIN: (22.0+/-2.0) dB
 LNA NOISE FIGURE: 2.0 dB
 LNA P 1dB Out: +13 dBm
 VOLTAGE/CURRENT: (+2.4 TO +5) Volts DC / (15 TO 30) mA

MECHANICAL:

SIZE: DIAMETER: 1.00 in. [25.40 mm]
 HEIGHT: 4.35 in. [110.49 mm]
 WEIGHT: 3.3 oz (93.55 g)
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5441
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
 CONNECTOR: SMA FEMALE CONNECTOR
 (OPTION: MCX, SMA, TNC, N, 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

**1" Dia. Pipe Mount
 P/N: 71G-MOUNT
 (Item 478a)**

CONFIGURATION	FREQUENCY:	POLARIZATION:	LNA:	CONNECTOR:	COLOR:
1: 2" SQ. (FLAT)	1216; L1/L2/Inmarsat	LL: LHCP	A: WITH LNA	S: SMA; Q: QMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.5: 1.5" SQ. (FLAT)	1215; L1/L2	RR: RHCP	P: WITHOUT LNA	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.8" DIA. (FLAT)	15: L1	V: VERTICAL		N: N; NB: N-Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
3: 3.5" DIA. (FLAT)	16: IRIDIUM			T: TNC; TB: TNC-Bulkhead	-30: OLIVE DRAB GREEN #34031 PER FED-STD-595B
4: MINI ARINC (FLAT)		RR: TX; RHCP, RX; RHCP			-4: LUSTERLESS BLACK #37030 PER FED-STD-595B
5: (HELIX ROD)					-5: TAN #33446 PER FED-STD-595B
5B: (HELIX BLADE)					
3D: (HELIX HANDHELD)					

P/N: 3D16RR-P-XS-1

QUANTITY	REQD	DESCRIPTION	PART NO	MATERIAL	FINISH	TEST
1	1					1
-2	-1					

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	ORIGINAL DRAWN	DATE	APPROVED
FRACTIONS: 1/16 TO 1/8 DECIMALS: .005 TO .015 ANGLES: ± 1/64 TO ± 1/2	S. HUYNH	Feb-23-04	
TOLERANCE .5M PER ANSI Y14.5	S. HUYNH	Feb-23-04	
REMOVE ALL SHARP BREAK EXTERNAL EDGES .005 TO .015	S. HUYNH	Feb-11-15	
FILETS R .005 TO R .002	P. TRAN	Feb-11-15	
SCREW THREADS PER MIL-C-8879	S. HUYNH	Feb-11-15	
DRAW ON A COMMON 1/2" DIA	S. HUYNH	Feb-11-15	
MACHINED SURFACES 125			

ANTCOM CORP. TORRANCE, CALIFORNIA

L1GPS/INMARSAT/
IRIDIUM HELIX ANTENNA

D13CVE1 3D16RR-P-XS-1

SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas