



ISO 9001:2008/FAA Approved Facility

Iridium/Inmarsat/Glonass/L1GPS Antennas, P/N: 3D16X-XTB-X-3
 Iridium/Inmarsat/Glonass/L1/L2 GPS Antennas, P/N: 3D1216X-XTB-X-3
 Rx Only Thuraya Antenna, P/N: 3DRxTX-XTB-X-3
 Rx Only Inmarsat/Iridium Antenna, P/N: 3DRxINX-XTB-X-3
 Rx/Tx Thuraya Antenna, P/N: 3DRxTxTX-XTB-X-3
 Rx/Tx Inmarsat/Iridium Antenna, P/N: 3DRxTxINX-XTB-X-3
 1" Dia. x 4.2" Tall, Threaded Bottom Mount Configuration



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

Technical drawing of the antenna showing dimensions: diameter 1.000 in, height 4.200 in, total height 5.100 in, and connector details.

SPECIFICATIONS

ELECTRICAL:	REVISIONS						
	ZONE	REV	DESCRIPTION	DATE	APPROVED		
FREQUENCY (MHz):	(1575.42 ±13)	(1542.50 ±17.5)	(1642.50 ±17.5)	(1602-1616)	(1616-1626)	(1227.60 ±13)	(1252.50 ±7.5)/ (1176.45 ±12)
GAIN (dBic)	L1 GPS	Rx INMARSAT	Tx INMARSAT	GLONASS	IRIDIUM	L2 GPS	L2 GLONASS/ 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						
LIGHTNING PROTECTION:	D.C GROUNDING						

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: 5.1 in. [129.5 mm]
 WEIGHT: 1.38 oz (39.0 g)
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5441F
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,
 SKYDROL RESISTANCE, AND FIRE RETARDANT

CONNECTOR: TNC-Bulkhead
 (OPTION: SMA-Bulkhead, TNC, 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

CONFIGURATION:	FREQUENCY:	LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
1: 2" SO. (FLAT)	1216: L1/L2/Inmarsat	A2: WITH LNA	X: NO CABLE	S: SMA	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.8: 1.9" SO. (FLAT)	1215: L1/L2	P: WITHOUT LNA	R: CABLE LENGTH (IN)	M: MCX; MM; MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.0" DIA. (FLAT)	15: L1		N: N; NB: N-Bulkhead	T: TNC; TB: TNC-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
3: 3.5" DIA. (FLAT)	RR: TX: RHCP, RX: RHCP		R: RIGHT ANGLE CON.		-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINIMARINE (FLAT)					-5: TAN #33446 PER FED-STD-595B
5: (HELIX ROD)					
5B: (HELIX BLADE)					
3D: (HELIX HANDFELD)					

QUANTITY	DESCRIPTION	PART NO	MATERIAL	FINISH	REP
1					1
1					1

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

P/N: 3D1216X-XTB-X-3

UNLESS OTHERWISE SPECIFIED	ANTCOM CORP.
ORIGINAL DESIGNED BY: S. HUYNH	Mer-08-12
ORIGINAL DESIGNED DATE: Mer-08-12	
UPDATE BY: S. HUYNH	Oct-02-12
UPDATE DATE: Oct-02-12	
APPROVED BY: S. HUYNH	Oct-02-12
APPROVED DATE: Oct-02-12	

ANTCOM CORP.

0.5-28 Threaded Base Helix
GPS/INMARSAT/GLONASS/
IRIDIUM ANTENNA

D3CVE1

3D1216X-XTB-X-3

SCALE: 1/1

SHEET 1 OF 1

NMO Connector is Now Available for Some Antennas