



IRIDIUM/Inmarsat/GPS Antennas, P/N: 3D1216P-XSS-X

1" Diameter x 4.2" Tall, Quick Connect SMA, Swivel, Side Mount Configurations



ISO 9001:2008/FAA Approved Facility

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

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IRIDIUM

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)	(1227.60 ±15)
GAIN in FS/3in GP (dBic)	L1 GPS	Rx INMARSAT	Tx INMARSAT	GLONASS	IRIDIUM	L2 GPS
@ 90° (Zenith):	+1.2/+0.9	+0.9/+0.5	-0.1/-0.5	+0.8/+0.3	+0.3/-0.1	-5.2
@ 10° Elevation:	-1.7/-1.1	-2.2/-1.8	-2.3/-2.1	-1.9/-1.5	-2.2/-1.8	-6.7 to -11.7
@ 20° Elevation:	-0.7/-0.4	-1.2/-1.0	-1.3/-1.3	-0.8/-0.7	-1.1/-1.0	-6.4 to -9.6
@ 30° Elevation:	+0.0/+0.1	-0.4/-0.4	-0.9/-1.0	-0.2/-0.1	-0.5/-0.9	-5.9 to -7.9
@ 45° Elevation:	+0.5/+0.4	+0.3/+0.1	-0.4/-0.9	+0.1/-0.5	+0.1/-0.5	-4.8 to -6.2
@ 70° Elevation:	+1.0/+0.1	+0.8/+0.1	-0.6/-1.8	+0.5/-0.5	+0.0/-0.9	-4.2
BEAM WIDTH (3dB)	152/173 Deg.	150/173 Deg.	170/180 Deg.	160/180 Deg.	160/182 Deg.	(107 to 170) Deg.
AXIAL RATIO (dB)	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	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: 2.0 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: 4.4 in. [111.76 mm]
 WEIGHT: 3.3 oz (93.55 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: SMA MALE CONNECTOR, 360° SWIVELS
 (OPTION: MCX, SMA, TNC, 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-1-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

QUANTITY	REQD	DESCRIPTION	PART NO	MATERIAL	FINISH	NOTES
1	1	O-Ring	AS568A-12 (McMaster P/N: 94115K012)			
1	1	5in SMA Bulkhead Jack to MMCX Right Angle Plug RF Cable	RG316-IMCX-RM-5.00-SMA-F-B			

CONFIGURATION:	FREQUENCY:	LNA:	CABLE LENGTH:	ANTENNA SWIVEL CONNECTOR	COLOR:
1: 2" SQ. (FLAT)	1216: L1/L2/Inmarsat	A1: WITH LNA	X: NO CABLE	S: SMA; Q: QMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	1215: L1/L2		M: WITH MAG. MOUNT	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)	15: L1	P: WITHOUT LNA	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
4: MINI ARINC (FLAT)					
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: 3D1216P-XSS-3

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ± 1/64 UNLESS OTHERWISE SPECIFIED	DATE	BY	CHKD	APP'D	REV
DATE: 06/05/2014	06/05/2014	S. HLYNTH	JON-24-04		1

DO NOT SCALE DRAWING

SCALE 1/1

SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas