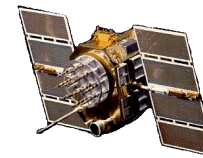




# Iridium/Inmarsat/L1/L2 GPS/Glonass/L-Band (1-2 GHz) Helix Antenna

P/N: 18x2.5H1215R-P-XS-1

2.5" Diameter x 18" Tall, Front/Back Mount Configuration, *for Space Applications*  
with SMA, TNC, N, or BNC Connector Options



ISO 9001:2008/FAA Approved Facility

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

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REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	

**ELECTRICAL:**

FREQUENCY (MHz):	L5 GPS E5, E5a, E5b, Galileo L5 IRNSS	L2 GPS B2 Compass	L2 GLONASS E6 Galileo B3 Compass	Omnistar / L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 GLONASS
	1176.45 ± 12.0 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15.0 MHz	1227.80 ± 12.0 MHz 1207.14 ± 10.0 MHz	1262.50 ± 7.5 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10.0 MHz	1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10.0 MHz	1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz	1600.0 ± 7.0 MHz

**SPECIFICATIONS**

GAIN (dBic) in FS	+ 11.5 dBic
AXIAL RATIO (dB)	1 to 2
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.7 : 1
POWER HANDLING:	200 watts

18.000 [457.20]

D

C

B

A

**MECHANICAL:**

SIZE: TOP DIA = 2.50 in [ 63.50mm], BASEDIA = 3.50 in[ 88.90mm]  
HEIGHT = 18 in. [457 mm]

WEIGHT: 16.2oz. (460 +/-10)grams

FINISH: SKYDROLRESISTANTPOLYURETHANENAMEL  
BASE IRIDITE PER MIL-C-5541F TYPE II CLASS 1A

COLOR: GLOSS WHITE #17925PER FED-STD-595B  
LUSTERLESSGRAY #36320PER FED-STD-595B  
OLIVE DRAB GREEN#34031PER FED-STD-595B  
LUSTERLESSBLACK#37038PER FED-STD-595B

MATERIAL: 6061-T6ALUMINUMALLOY BASE  
COMPOSITE RADOME,IMPACT, ABRASION,UV, SOLVENT,  
AND SKYDROLRESISTANCE, FIRE RETARDANT

CONNECTOR: SMA-Female  
(OPTION:TNC, TNC-Bulkhead,N, N-Bulkhead,BNC)

**ENVIRONMENTAL:**

TEMPERATURE: -166 °F TO +248 °F [-110 °C TO +120 °C]  
ALTITUDE: 70,000ft.  
VIBRATION: > 30 G's

**FEDERAL & MILITARY SPECIFICATIONS**

DESIGN TO: FAA TSO-C144,DO-160D,D0-228,MIL-C-5541F,  
MIL-E-5400,MIL-I-45208A,MIL-STD-810,AND SAE J1455

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	ITEM NO
4	MOUNTING SCREW: (10-32 Pan Head Phillips, 1/2")	MS51958-63	-	5
4	MOUNTING SCREW: (10-32 Pan Head Phillips, 1/4")	MS51958-59	-	4
1				3
1				2
1				1

HIGH(in):	POLARIZATION:	LNA:	CABLE LENGTH	CONNECTOR	COLOR
	LL: TX: LHCP, RX: RHCP	A1: WITH+34 dB LNA	X: NO CABLE	S: SMA, P: PINS	-1- GLOSSWHITE#17925PER FED-STD-595B
	LR: TX: LHCP, RX: RHCP		M: WITH MAG. MOUNT	M: MMCX, MM: MMCX	-2- LUSTERLESSGRAY#36320PER FED-STD-595B
	RL: TX: RHCP, RX: LHCP	P: WITHOUT LNA	#: CABLE LENGTH(IN)	N: N, NB: N-Bulkhead	-3- OLIVE DRAB GREEN#34031PER FED-STD-595B
	RR: TX: RHCP, RX: RHCP		R: RIGHT ANGLE CON.	T: TNC, TB: TNC-Bulkhead	-4- LUSTERLESSBLACK#37038PER FED-STD-595B
	R: RHCP				
	L: LHCP				

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1

2

3

4

5

6

7

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 ± .015 ± .001 ± 1°

TOLERANCE 51M PER ANSI Y14.5

REPROF. ALL SURFACES BEING INTERNAL EDGES .006 TO .016

FIELD IN USE TO R 1040

SOFTEN THERMOSET FOR MIL-C-5541F

5A'S ON A COINTEGRATED .006

MACHINED SURFACES

DO NOT SCALE DRAWING

ANTCOM CORP.

HIGH GAIN  
GPS/GLONASS/IRIDIUM/  
INMARSAT HELIX ANTENNA

DESIGNED BY: S. HUYNH  
APPROVED: S. HUYNH  
DATE: DEC-07-09

SCALE: 1/1

SHEET 1 OF 1

ANTCOM CORP. TORRANCE, CALIFORNIA

NMO Connector Option is Now Available for Some Antennas