



FAA Approved Facility

# L1/L2 GPS/L-Band (1-2 GHz) Helix Antenna, P/N: 18x6.3H1215R-P-XS-1

## 2.5" Diameter x 18" Tall, Front/Back Mount Configuration, *for Space Applications*

### with SMA, TNC, N, or BNC Connector Options

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



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4x1.061 [26.94]

4x0.207 [05.25] Thru. for M5 Screws

06.300 [160.02]

2.500 [63.50]

18.000 [457.20]

4.016 [102.00]

0.357 [9.07]

4xM5 Threads x0.225in Deep

2x2.687 [68.25]

SMA-Female Connector

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### SPECIFICATIONS

**ELECTRICAL:**

FREQUENCY (MHz):	L5 GPS E5, E5a, E5b, Galileo L5 IRNSS	L2 GPS B2 Compass	L2 GLONASS E6 Galileo E5 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	1227.60 ± 12.0 MHz 1207.14 ± 10.0 MHz	1252.50 ± 1.5 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	1609.0 ± 7.0 MHz
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					

**MECHANICAL:**

SIZE: TOP DIA = 2.50 in [ 63.50 mm], BASE DIA = 6.30 in[ 160.02 mm]  
 HEIGHT = 18 in. [457 mm]

WEIGHT: 16.75 oz. (475 +/-10) grams

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
 BASE IRIDITE PER MIL-C-5541F TYPE II CLASS 1A

COLOR: GLOSS WHITE #17925 PER FED-STD-595B  
 LUSTERLESS GRAY #36320 PER FED-STD-595B  
 OLIVE DRAB GREEN #34031 PER FED-STD-595B  
 LUSTERLESS BLACK #37038 PER FED-STD-595B

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, AND SKYDROL RESISTANCE, 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: 70,000 ft.  
 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	TITLE NO
4	MOUNTING SCREW: (M5 Pan Head Phillips, 10mm)	90116A250	-	5
4	MOUNTING SCREW: (M5 Pan Head Phillips, 20mm)	90116A260	-	4
1			-	3
1			-	2
1			-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	ANTCOM CORP. TORRANCE CALIFORNIA
FRACTIONS TO BE DECIMALS UNLESS OTHERWISE NOTED	<b>ANTCOM CORP.</b> TORRANCE CALIFORNIA HIGH GAIN GPS/GLONASS/IRIDIUM/INMARSAT HELIX ANTENNA
TOLERANCE SURF PER ASME Y14.5	
REMOVE ALL BURRS	ENGINEER
DRILL HOLE DEPTH 0.000 TO 0.015	APPROVED S. HUYNH DEC-07-09
FILLET R .005 TO R .020	DWG NO 3CVE1
SOCKET THREADS PER UNF-2-9879	DRAWING NO 18x6.3H1215R-P-XS-1
DIA'S ON A CROWN E OF .005	SCALE 1/1
MACHINED SURFACES	SHEET 1 OF 1
DO NOT SCALE DRAWING	