



FAA Approved Facility

# 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*

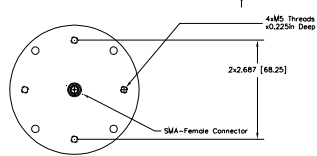
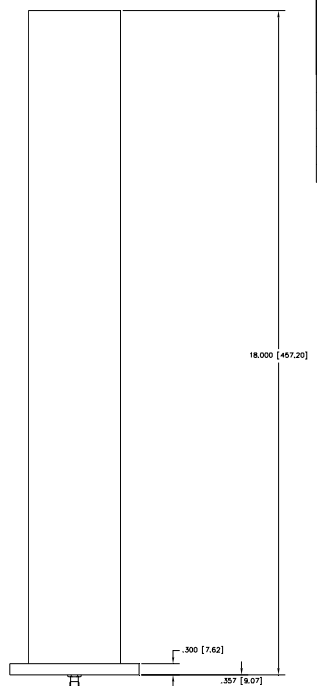
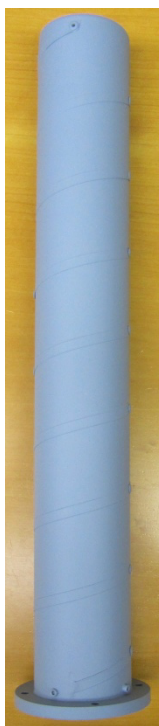
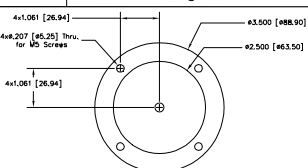
#### with SMA, TNC, N, or BNC Connector Options

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



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### SPECIFICATIONS

#### 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 1184.45 - 1218.14 MHz 1176.45 ± 15.0 MHz	1227.60 ± 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	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 = 3.50 in[ 88.90 mm]  
**HEIGHT =** 18 in. [457 mm]  
**WEIGHT:** 16.2 oz. (460 +/-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

High (in):	POLARIZATION:	LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
LL: TX: LHCP, RX: LHCP	AT: WITH +34 dB LNA	X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B	
LR: TX: LHCP, RX: RHCP	M: WITH MAG. MOUNT	M: MCX; MM: MMCX	N: N; NB: N-Bulkhead	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B	
RL: TX: RHCP, RX: LHCP	P: WITHOUT LNA	R: RIGHT ANGLE CON.	T: TNC; TB: TNC-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B	
RR: TX: RHCP, RX: RHCP				-4: LUSTERLESS BLACK #37038 PER FED-STD-595B	
R: RHCP					
L: LHCP					

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

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	TRF 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
-1	DESCRIPTION	PART NO	FINISH	TRF NO

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		ANTCOM CORP. TORRANCE CALIFORNIA	
FRACTIONS	DECIMALS	<b>ANTCOM CORP.</b> HIGH GAIN GPS/GLONASS/IRIDIUM/ INMARSAT HELIX ANTENNA	
± 1/64	± .005		
TOLERANCE SURF PER ANSI Y14.5		DATE	SCALE
BREAK EXTERNAL EDGES .005 TO .015		ENGINEER	18x2.5H1215R-P-XS-1
FILLER .005 TO .010		APPROVED S. HILYNN	SHEET 1 OF 1
SCREEN HOLE DIA PER MIL-S-8879		DATE DEC-07-09	
DIA'S ON A COMMON S. OF .005		CAD FILE NO	
MACHINED SURFACES		SCALE 1/1	
DO NOT SCALE DRAWING			