



FAA Approved Facility

**LHCP or RHCP S-Band Rod Antenna**  
 (2.00-2.30) GHz: P/N: 5W-2.00-2.30PL-XTB-4 (LHCP); P/N: 5W-2.00-2.30PR-XTB-4 (RHCP)  
 (2.20-2.40) GHz: P/N: 5W-2.20-2.40PL-XTB-4 (LHCP); P/N: 5W-2.20-2.40PR-XTB-4 (RHCP)  
 (2.40-2.50) GHz: P/N: 5W-2.40-2.50PL-XTB-4 (LHCP); P/N: 5W-2.40-2.50PR-XTB-4 (RHCP)

Other Frequencies, Spring loaded, & Gooseneck Mounting Options are Available

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



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807 [20.50] TNC-BULKHEAD CONNECTOR  
 (OPTION: TNC - 0.57" [14.53]  
 SMA/R-SMA - 0.46" [11.68]  
 N, N-BH - 0.72" [18.29]  
 MCX/MMCX - 0.25" [6.37])

**SPECIFICATIONS**

**ELECTRICAL:** [Click Here to View Radiation Patterns:](http://www.antcom.com/documents/catalogs/S-Band-Helix1.pdf)

FREQUENCY:	(2338.75 +/- 10) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	LHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
GAIN (ABOVE HORIZONTAL, dBic):	
@ 15° Elevation:	+0.2
@ 20° Elevation:	+0.5
@ 30° Elevation:	+1.2
@ 45° Elevation:	+0.3
AXIAL RATIO @ Zenith:	1.0 dB
POWER HANDLING:	1 Watt
DC GROUNDING:	YES (LIGHTNING PROTECTION)
<b>OPTION (ACTIVE):</b>	
LNA GAIN:	33 +/- 2 dB
LNA NOISE FIGURE:	2.2 dB
LNA DC POWER:	(+2.5 to +30) Volts DC, < 38 mA FROM Rx RF CON.

**MECHANICAL:**

SIZE: DIAMETER: 0.500 in [12.70 mm]  
 HEIGHT: 4.41 in [112.0 mm]

WEIGHT: 0.6 oz. (17g);

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
 BLACK ANODIZE PER MIL-A-8625F

COLOR: LUSTERLESS GRAY #36320 PER FED-STD-595B  
 GLOSS WHITE #17925 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  
 THERMOSET PLASTIC RADOME, UV, ABRASION AND SKYDROL RESISTANCE

CONNECTOR: TNC FEMALE BULKHEAD (SMA, N, AND OTHERS ARE OPTIONAL)

**ENVIRONMENTAL:**

TEMPERATURE: -67°F TO +185°F [-55°C TO +85°C]  
 ALTITUDE: 70,000 ft.  
 VIBRATION: >10 G's  
 LEAKAGE: HERMETICALLY SEALED

**FEDERAL & MILITARY SPECIFICATIONS:**

**DESIGN TO:** DO-160D, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810E

[Click Here to View Radiation Patterns:](http://www.antcom.com/documents/catalogs/S-Band-Helix1.pdf)

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FREQUENCY (GHz):	LNA:	POLARIZATION:	CONNECTOR:	COLOR:
2.20 - 2.30	A1: 10 dB	R: RHCP	S: SMA FEMALE	-1: GLOSS WHITE #17925 PER FED-STD-595B
2.00 - 2.40	A2: 20 dB	L: LHCP	SM: SMA MALE	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2.40 - 2.50	P: PASSIVE		T: TNC FEMALE	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
			TM: TNC MALE	-4: Natural Black Color from Ultem 2200 Black (20% Glass)
			N: N FEMALE; B: BNC FEMALE	-5: DESERT TAN #33446 PER FED-STD-595B
			NM: N MALE; BN: BNC MALE	

P/N: 5W-X.XX-Y.YYPL-XTB-4

1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
1						1

QUANTITY REQD PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

FRACTIONS TOLERANCES ARE: DECIMALS ANGLES  
 $\pm 1/64$  .xxx .015  $\pm 1'$   
 .xxxx .005

TOLERANCE 5VM PER ANSI Y14.5

REMOVE ALL BURRS  
 BREAK EXTERNAL EDGES .005 TO .015  
 FILETS R .005 TO R .030  
 SCREW THREADS PER MIL-S-8879  
 DIA'S ON A COMMON  $\pm .0005$

MACHINED SURFACES  $\sqrt{125}$

DO NOT SCALE DRAWING

ORIGINALLY DRAWN	S. HUYNH	Moy-08-12
ORIGINALLY DESIGNED	S. HUYNH	Moy-08-12
UPDATED	S. HUYNH	Dec-11-13
UPDATE DRAWN	P. TRAN	Dec-11-13
APPROVED	S. HUYNH	Dec-11-13

SIZE	DATE	DRAWING NO	REV
D	3C	VE1	5W-X.XX-Y.YYPL-XTB-4

SCALE 1/1 SHEET 1 OF 1

**ANTCOM CORP.** TORRANCE CALIFORNIA

RHCP or LHCP  
 S-BAND ANTENNA

DATE: 11/13/13

SCALE: 1/1

SHEET 1 OF 1