

# XM or SIRIUS Radio Helix Antenna

## 3" High Configuration, P/N: 32X23X-XX-X

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

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3.190 [81.03]  
Ø2.600 [Ø66.04]  
Ø1.000 [Ø25.40]  
R.38 [R9.53] (BLEND)  
0.57" [14.53] (TNC), 0.72" [18.29] (N, N-Bulkhead)  
0.46" [11.68] (SMA), 0.83" [21.00] (TNC-Bulkhead)  
TNC BULKHEAD CONNECTOR  
(OPTION: TNC, SMA, N, N Bulkhead  
MCX, MMCX, or Cable)  
Optional Mounting:  
4X 6-32 UNC-2B, 0.160" Deep, &  
ADHESIVE GASKET  
4x .815 [20.70]  
4x .815 [20.70]  
0.148 [3.77]  
.255 [6.48]

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.		A: WITH LNA
1.9: 1.9" SQ.		
2: 2.0" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		
4: MINI ARINC		

**P/N: 32M23A-XT-1**

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG; N: NO MAG	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
F: CABLE LENGTH (IN)	N: NB; N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TR; TNC; TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

NOTES: UNLESS OTHERWISE SPECIFIED:  
3. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION  
2. MOUNTING HEX NUT AND LOCK WASHER ARE SUPPLIED BY ANTCOM CORPORATION  
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

### SPECIFICATIONS

		REVISIONS	
ZONE	REV	DESCRIPTION	DATE

**ELECTRICAL:**

FREQUENCY:	(2338.75 +/- 10) MHz	SEE PART NO. BELOW
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	LHCP	
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
GAIN (dBic):		
@ 90° (Zenith):	- 0.5	
@ 10° Elevation:	0.0	
@ 20° Elevation:	+0.5	
@ 30° Elevation:	+1.0	
@ 45° Elevation:	+1.1	
@ 70° Elevation:	+0.4	
AXIAL RATIO @ Zenith:	2.0 dB	
POWER HANDLING:	1 Watt	
DC GROUNDING:	YES (LIGHTNING PROTECTION)	
FILTER (REJ. @1616 MHz):	20 dB (F0 Option), > 57 dB (F1)	
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: 2.60 in.[ 66.04 mm]  
HEIGHT: 3.19 in.[ 81.03 mm]  
WEIGHT: 4.00 oz. (113 g)  
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441  
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT  
CONNECTOR: TNC BULKHEAD (OPTION: TNC, SMA, N, N Bulkhead, MCX, MMCX, or Cable)

**ENVIRONMENTAL:**

TEMPERATURE: -67 °F TO +185°F [-55°C TO +85°C]  
ALTITUDE: 70,000 ft.  
VIBRATION: > 30 G's  
LEAKAGE: HERMETICALLY SEAL

**FEDERAL & MILITARY SPECIFICATIONS:**

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

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	HTG
						5
1	ADHESIVE GASKET	12345G-3M-2G				3
1	WASHER, LOCK	AN936B816				2
1	HEX NUT, MOUNTING	1/2-20 HEX				1
-2						

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS AND ANGLES ± 1/64 .015 .006 ANGLES ± 1'

TOLERANCE 5/16 PER ANS Y145

SEAL: ALL SURF. SEAL EXTERNAL EDGES .006 TO .016 RADIUS .015 FOR TO 9 .000 SCREW THREADS PER MIL-E-8879 DATA ON A COMBINATION LOCK MACHINED SURFACES

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE CALIFORNIA

OUTLINE DRAWING  
ACTIVE or PASSIVE  
XM RADIO ANTENNA

DESIGNED: M. BOJAS 01-05-29  
CHECKED: S. HUYNH 01-05-29  
APPROVED: S. HUYNH 01-05-29  
DATE: 01-05-29

SCALE 1/1

SHEET 1 OF 1

CC: 3CVE1, NAICS: 334511, S.H, 6/10/2014

<http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf> (Amplifiers/Power Divider/Combiner/Filters)

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