



FAA Approved Facility

### High Gain S-Band Helix Antenna

P/N: 28x1.6H2223R-P-XT-1 (2.2-2.3 GHz, TNC, White), P/N: 28x1.6H2425R-P-XT-1 (2.4-2.5 GHz, TNC, White)

P/N: 28x1.6H2025R-P-XT-1 (2.0-2.5 GHz, TNC, White), P/N: 28x1.6H1625R-P-XT-1 (1.6-2.5 GHz, TNC, White)

Other Frequencies, LNAs, Polarizations, Connectors and Colors are Available

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

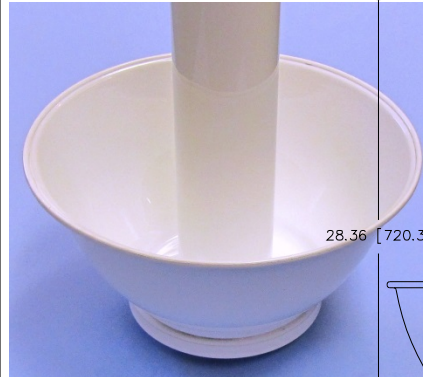


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**SPECIFICATIONS**

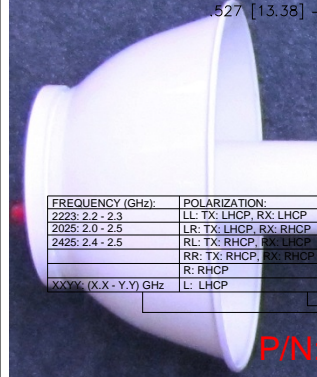
ZONE	REV	REVISIONS		
		DESCRIPTION	DATE	APPROVED



28.36 [720.3]



ø6.440 [ø163.58]  
ø3.500 [ø88.90]



1.527 [13.38]

1.650 [41.91] Dia.

**ELECTRICAL:**

FREQUENCY (GHz):	1.6 GHz	1.7 GHz	1.8 GHz	1.9 GHz	2.0 GHz	2.1 GHz	S-BAND (2.20-2.30)	2.4 GHz	2.5 GHz
ANTENNA GAIN (dBic):	1.8 dBic	9.6 dBic	11.6 dBic	11.7 dBic	13.5 dBic	15.8 dBic	15.4 dBic	14.5 dBic	12.6 dBic
RADIATION PATTERN:	DIRECTIONAL								
POLARIZATION:	RHCP								
VSWR:	2.0:1								
IMPEDANCE:	50 ohms								

**MECHANICAL:**

SIZE: TOP DIA = 1.65in [41.9 mm], BASE DIA = 3.50 in [88.90 mm]  
HEIGHT = 28.36in [720.3mm]

WEIGHT: 45 oz. (1.27 kg)

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: TNC FEMALE (OPTION: SMA, N, BNC)

**ENVIRONMENTAL:**

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

LEAKAGE: HERMETICALLY SEALED

**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

4x 10-32 UNF  
.135 Deep

1.250 [31.75] SQ.  
1.630 [41.41] SQ.  
1.900 [48.25] SQ.  
2.687 [68.24] SQ.

TNC FEMALE CONNECTOR

4x 4-40 UNF  
.250in Deep

8x 6-32 UNF  
.250in Deep

FREQUENCY (GHz):	POLARIZATION:	LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
2223: 2.2 - 2.3	LL: TX: LHCP, RX: RHCP	A: WITH +34 dB LNA	X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
2025: 2.0 - 2.5	LR: TX: LHCP, RX: RHCP	P: WITHOUT LNA	M: WITH MAG. MOUNT	M: MCX; MM: MMX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2425: 2.4 - 2.5	RL: TX: RHCP, RX: LHCP		N: N; NB: N-Bulkhead	T: TNC; TB: TNC-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
	RR: TX: RHCP, RX: RHCP		R: RIGHT ANGLE CON.		-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	R: RHCP				
XXXX: (X.X - Y.Y) GHz	L: LHCP				

4 MOUNTING SCREW: (10-32 Pan Head Phillips, 1/4") MS51958-59

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 .001 .005 ± 1°

TOLERANCE SHV PER ANSI Y14.5 REMOVE ALL BURRS BREAK ALL SHARP EDGES .005 TO .015 FILED & POL TO .0015 SCREEN FINISHES PER MIL-S-8879 DMS ON A COMMON & 2P.005 MACHINED SURFACES 12.5

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE, CALIFORNIA

HIGH GAIN S-BAND HELIX ANTENNA

REV: 30VE1 DRAWN BY: P. TRAN DATE: JULY-01-13

SCALE: 1/1 SHEET: 1 OF 1

P/N: 28x1.6H2223R-P-XT-1