



ISO 9001:2008/FAA Approved Facility

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

### High Gain S-Band Helix Antenna

P/N: 28x1.6H2223R-P-XT-1-NB (2.2-2.3 GHz, TNC, White), P/N: 28x1.6H2425R-P-XT-1-NB (2.4-2.5 GHz, TNC, White)  
 P/N: 28x1.6H2025R-P-XT-1-NB (2.0-2.5 GHz, TNC, White), P/N: 28x1.6H1625R-P-XT-1-NB (1.6-2.5 GHz, TNC, White)

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



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**SPECIFICATIONS**

		REVISIONS			
ZONE	REV	DESCRIPTION	DATE	APPROVED	

**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 #38320 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

REVISIONS

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

**PARTS LIST**

UNLESS OTHERWISE SPECIFIED		TOLERANCES ARE IN INCHES	
FRACTIONS	DECIMALS	ANGLES	
± 1/64	± .001	± 1°	
TOLERANCE SURF PER ANSI Y14.5		REMOVE ALL BURRS	
BREAK EXTERNAL EDGES .005 TO .015		FILED & .005 TO .010	
SCREW THREADS PER MIL-C-8879		DATA ON A COMBINATION OF	
MACHINED SURFACES		125	
DO NOT SCALE DRAWING			

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

FREQUENCY (GHz):	POLARIZATION:	LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
2223: 2.2 - 2.3	L: 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	L: TX: LHCP, RX: RHCP	P: WITHOUT LNA	M: WITH MAG. MOUNT	M: MMCX	-2: LUSTERLESS GRAY #38320 PER FED-STD-595B
2425: 2.4 - 2.5	R: TX: RHCP, RX: LHCP		#: CABLE LENGTH (IN)	N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
	RR: TX: RHCP, RX: LHCP		R: RIGHT ANGLE CONN.	T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	R: RHCP				
XXYY: (X.X - Y.Y) GHz	L: LHCP				