



FAA Approved Facility

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

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



ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

7
6
5
4
3
2
1

SPECIFICATIONS

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

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

7
6
5
4
3
2
1

1.650 [41.91] Dia.

28.36 [720.3]

TNC FEMALE CONNECTOR

4x 10-32 UNF
.135 Deep

ø3.500 [ø88.90]

1.250 [31.75] SQ.

1.630 [41.41] SQ.

1.900 [48.25] SQ.

2.687 [68.24] SQ.

4x 4-40 UNG
.250in Deep

8x 6-32 UNG
.250in Deep

.527 [13.38]

7
6
5
4
3
2
1

FREQUENCY (GHz):	POLARIZATION:	LNAs:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
2223; 2.2 - 2.3	L: TX: LHCP, RX: LHCP	A: WITH +34 dB LNA	X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
2425; 2.0 - 2.5	L: TX: LHCP, RX: RHCP	F: WITHOUT LNA	M: WITH MAG. MOUNT	M: MCM; MCM; MCMX	+2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2428; 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: RHCP		R: RIGHT ANGLE CONN	T: TNC; TR: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	R: RHCP				
XXXX; (X-X - Y-Y) GHz	L: LHCP				

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

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

QUANTITY REQD PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	ORIGINALLY DRAWN S. HUYNH July-01-13	ANTCOM CORP. TORRANCE, CALIFORNIA HIGH GAIN S-BAND HELIX ANTENNA
FRACTIONS TO BE DECIMALS ANGLES TO BE DEGREES	ORIGINALLY DESIGNED S. HUYNH July-01-13	
TOLERANCE .5M PER ANSI Y14.5	UPDATED S. HUYNH April-13-15	
REMOVE ALL SHARP BREAK EXTERNAL EDGES .005 TO .015 FILETS R .005 TO R1.000	UPDATE DRAWN P. TRIAN April-13-15	
SCREW THREADS PER MIL-C-8879 DIA'S ON A COMMON C. OF .005	APPROVED S. HUYNH April-13-15	SHEET NO: 28x1.6H2223R-P-XT-1-NB SCALE: 1/1 SHEET 1 OF 1
MACHINED SURFACES 125		
DO NOT SCALE DRAWING		