

TACOTM

ANTENNA

UHF SATCOM HELICALS



Mast Mounted Helical

AM-1 Adjustable Mast Mount
NSN 5985-01-587-7470

CIRCULAR POLARIZED UFO & MUOS COMPATIBLE

TACO's circularly polarized high gain fixed UHF SATCOM antennas are designed to withstand harsh environmental conditions. Presently used by all branches of the US military and various defense contractors worldwide, TACO Helicals are an industry leading communication product.

Solid construction using high quality materials

Stainless steel helix supported by dielectric rods along mast

Control remotely with electrical pan & tilt positioners

- 2-piece ground plane assembles easily with no tools required

- Mesh design allows for reduced wind loading

- RoHS and REACH compliant



HM-5-A Tripod Mount
NSN 5940-01-664-0101

Tripod Mounted Helical

MOUNT OPTIONS

MODEL	HEIGHT in/cm	WEIGHT lbs/kg	POSITION - °		MAST OD in/cm
			Azimuth	Elevation	
AM-1 Mast Mount	N/A	48.2 / 21.9	360	15 ± 90, Fixed increments	2.875-4.5/7.3-11.4
HM-5-A Tripod	48.0/121.9	*125.0/56.7	360	-5 to 95	3.0/7.6
HM-5-B Tripod	48.0/121.9	**172.0/78.0	360	-5 to 95	3.0/7.6
HM-5-C Tripod	48.0/121.9	***219.0/99.3	360	-5 to 95	3.0/7.6

*2, **4, and ***6 counter-weights

SPECIFICATIONS

Environmental

- Operating Temp. -40° to 70°C (-40° to 158°F)
- Rain, salt-fog, sand, dust and fungus to: MIL-STD 810G

Electrical

- 1 Output
- Impedance 50 Ohms
- Cross Pol Rejection 20dB
- N Connector Maximum Input Power 500W
- HN Connector Maximum Input Power 1000W

240-320 MHz	Model (NSN)	No. of Turns	Gain - dBic		Pol Dir.	HPBW °	Axial Ratio dB	F/B Ratio	VSWR		Std Conn.	Overall Length in/cm	Helical Diam in/cm	Ground Plane Diam - in/cm	COLOR	Antenna Weight lbs/kg
			Min	Max					Typ	Max						
			H-084	8					10.1	13.1						
H-104	10	10.2	13.4	RH	41	1.0	30.8	1.2	1.5:1	N F	134.0/340.4	13.4/34.0	35.0/89.0	RAL 7046 Battleship Grey	44.0/20.0	
H-124 (5985-01-476-0720)	12	11.0	15.0	RH	41	0.8	29.8	1.2	1.5:1	N F	155.0/393.7	13.4/34.0	35.0/89.0	RAL 7046 Battleship Grey	49.0/22.2	

225-400 MHz	Model (NSN)	No. of Turns	Gain - dBic		Pol Dir.	HPBW °	Axial Ratio dB	F/B Ratio	VSWR		Std Conn.	Overall Length in/cm	Helical Diam in/cm	Ground Plane Diam - in/cm	COLOR	Antenna Weight lbs/kg
			Min	Max					Typ	Max						
			H-064A	6					8.5	11.9						
H-084A (5985-01-587-3790)	8	8.8	12.8	RH	52	1.1	29.0	1.3	1.5:1	N F	102.8/261.1	11.9/30.2	35.0/89.0	RAL 7046 Battleship Grey	33.0/15.0	

300-520 MHz	Model (NSN)	No. of Turns	Gain - dBic		Pol Dir.	HPBW °	Axial Ratio dB	F/B Ratio	VSWR		Std Conn.	Overall Length in/cm	Helical Diam in/cm	Ground Plane Diam - in/cm	COLOR	Antenna Weight lbs/kg
			Min	Max					Typ	Max						
			H-065	6					10.2	12.3						
H-065-L	6	10.2	12.3	LH	43	1.1	27.9	1.3	1.5:1	N F	68.0/172.7	9.0 / 22.9	35.0/89.0	RAL 7046 Battleship Grey	25.0/11.3	
H-085	8	10.3	13.2	RH	40	0.9	28.7	1.3	1.5:1	N F	84.0/213.4	9.0 / 22.9	35.0/89.0	RAL 7046 Battleship Grey	27.0/12.3	
H-085-L	8	10.3	13.2	LH	40	0.9	28.7	1.3	1.5:1	N F	84.0/213.4	9.0/22.9	35.0/89.0	RAL 7046 Battleship Grey	27.0/12.3	
H-105	10	10.5	13.5	RH	37	0.8	29.7	1.3	1.5:1	N F	97.0/246.4	9.0/22.9	35.0/89.0	RAL 7046 Battleship Grey	33.0/15.0	
H-105-HN	10	10.5	13.5	RH	37	0.8	29.7	1.3	1.5:1	HN	97.0/246.4	9.0/22.9	35.0/89.0	RAL 7046 Battleship Grey	33.0/15.0	
H-105-L-HN	10	10.5	13.5	LH	37	0.8	29.7	1.3	1.5:1	HN	97.0/246.4	9.0/22.9	35.0/89.0	RAL 7046 Battleship Grey	33.0/15.0	

WIND LOADING

	MODEL	WIND AREA (sq. ft)		WIND LOAD (ft-lbs)		SURVIVAL RATING ***No Ice (mph)
		No Ice	½" Radial Ice	*No Ice	**½" Radial Ice	
240-320	H-084	2.50	5.64	344	223	150
	H-104	3.13	7.05	530	344	150
	H-124	3.75	8.46	755	491	150
225-400	H-064A	2.05	4.70	221	145	150
	H-084A	2.17	4.90	259	169	150
300-520	H-065	1.07	2.42	73	48	150
	H-065-L	1.07	2.42	73	48	150
	H-085	1.43	3.23	128	83	150
	H-085-L	1.43	3.23	128	83	150
	H-105	1.79	4.04	199	129	150
	H-105-HN	1.79	4.04	199	129	150
	H-105-L-HN	1.79	4.04	199	129	150

* Wind speed = 100 mph at sea level with one hundred percent humidity at seventy degrees Fahrenheit
 ** Wind speed = 50 mph at sea level with one hundred percent humidity at seventy degrees Fahrenheit
 *** Maximum wind speed at sea level with one hundred percent humidity at seventy degrees Fahrenheit. Safety factor of 1.65 included.

TACO Antenna's ongoing policy of continuing development may result in specification changes to its products.