

TACOTM

ANTENNA

UHF SATCOM HELICALS



CIRCULAR POLARIZED UFO AND MUOS COMPATABLE

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

Solidly constructed using an aluminum mast & ground plane

Mesh design allows for reduced wind loading

Helix supported by dielectric rods running along the mast

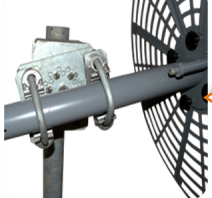
2-piece ground plane assembles easily with no tools required

Network up to 12 antennas

Control remotely with electrical pan & tilt positioners



AM-1 Adjustable Mast Mount



NSN 5985-01-587-7470

MOUNT OPTIONS

WEIGHT (lbs)	AZIMUTH	ELEVATION	MAST OD
48	Fixed increments	15° ± 90°, 31.3 KG	2.875-4.5"
*60/110/160	360°	- 5° to + 95° 27.2 KG	3"

*Two/Four/Six Counter-weights

HM-5 Tripod Mount



NSN 5940-01-664-0101

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SPEC0010_V01

SPECIFICATIONS

Environmental

- Operating Temp. -40° to 70°C (-40° to 158°F)
- Designed to meet 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 Elements	Gain (dBic)		Pol Dir.	HPBW (°)	Axial Ratio (dB)	F/B Ratio	VSWR		1 st Side Lobe Supp. (dB)	Std Conn.	Overall Length in (cm)	Helical Diam in (cm)	Ground Plane Diam in (cm)	Mount Stub Length in (cm)	Stub Diam in (cm)	Antenna Weight lbs (kg)
			Min	Max					Typ	Max								
			H-084	8					10.1	13.1								
H-104	10	10.2	13.4	RH	41	1.10	30.8	1.2	1.5:1	11.4	N F	134.0 (340.4)	13.4 (34.0)	35.0 (89.0)	23.0 (58.4)	2.9 (7.4)	44.0 (20.0)	
H-124 (5985-01-476-0720)	12	11.0	15.0	RH	41	1.08	29.8	1.2	1.5:1	13.0	N F	155.0 (393.7)	13.4 (34.0)	35.0 (89.0)	23.0 (58.4)	2.9 (7.4)	49.0 (22.2)	
225-400 MHz	Model (NSN)	No. of Elements	Gain (dBic)		Pol Dir.	HPBW (°)	Axial Ratio (dB)	F/B Ratio	VSWR		1 st Side Lobe Supp. (dB)	Std Conn.	Overall Length in (cm)	Helical Diam in (cm)	Ground Plane Diam in (cm)	Mount Stub Length in (cm)	Stub Diam in (cm)	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	1.13	29.0	1.3	1.6:1	13.0	N F	103.0 (261.6)	11.9 (30.2)	35.0 (89.0)	23.0 (58.4)	2.9 (7.4)	34.0 (15.4)	
300-520 MHz	Model (NSN)	No. of Elements	Gain (dBic)		Pol Dir.	HPBW (°)	Axial Ratio (dB)	F/B Ratio	VSWR		1 st Side Lobe Supp. (dB)	Std Conn.	Overall Length in (cm)	Helical Diam in (cm)	Ground Plane Diam in (cm)	Mount Stub Length in (cm)	Stub Diam in (cm)	Antenna Weight lbs (kg)
			Min	Max					Typ	Max								
	H-065	6	10.2	12.3	RH	43	1.17	27.9	1.3	1.5:1	15.5	N F	68.0 (172.7)	9.0 (22.9)	35.0 (89.0)	23.0 (58.4)	2.9 (7.4)	25.0 (11.3)
	H-065-L	6	10.2	12.3	LH	43	1.17	27.9	1.3	1.5:1	15.5	N F	68.0 (172.7)	9.0 (22.9)	35.0 (89.0)	23.0 (58.4)	2.9 (7.4)	25.0 (11.3)
	H-085	8	10.3	13.2	RH	40	1.13	28.7	1.3	1.5:1	14.0	N F	84.0 (213.4)	9.0 (22.9)	35.0 (89.0)	23.0 (58.4)	2.9 (7.4)	27.0 (12.3)
	H-085-L	8	10.3	13.2	LH	40	1.13	28.7	1.3	1.5:1	14.0	N F	84.0 (213.4)	9.0 (22.9)	35.0 (89.0)	23.0 (58.4)	2.9 (7.4)	27.0 (12.3)
	H-105	10	10.5	13.5	RH	37	1.10	29.7	1.3	1.5:1	13.0	N F	97.0 (246.4)	9.0 (22.9)	35.0 (89.0)	23.0 (58.4)	2.9 (7.4)	33.0 (15.0)
H-105-HN	10	10.5	13.5	RH	37	1.10	29.7	1.3	1.5:1	13.0	HN	97.0 (246.4)	9.0 (22.9)	35.0 (89.0)	23.0 (58.4)	2.9 (7.4)	33.0 (15.0)	
H-105-L-HN	10	10.5	13.5	LH	37	1.10	29.7	1.3	1.5:1	13.0	HN	97.0 (246.4)	9.0 (22.9)	35.0 (89.0)	23.0 (58.4)	2.9 (7.4)	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	
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
H-064A	2.05	4.70	221	145	150
H-084A	2.17	4.90	259	169	150
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.