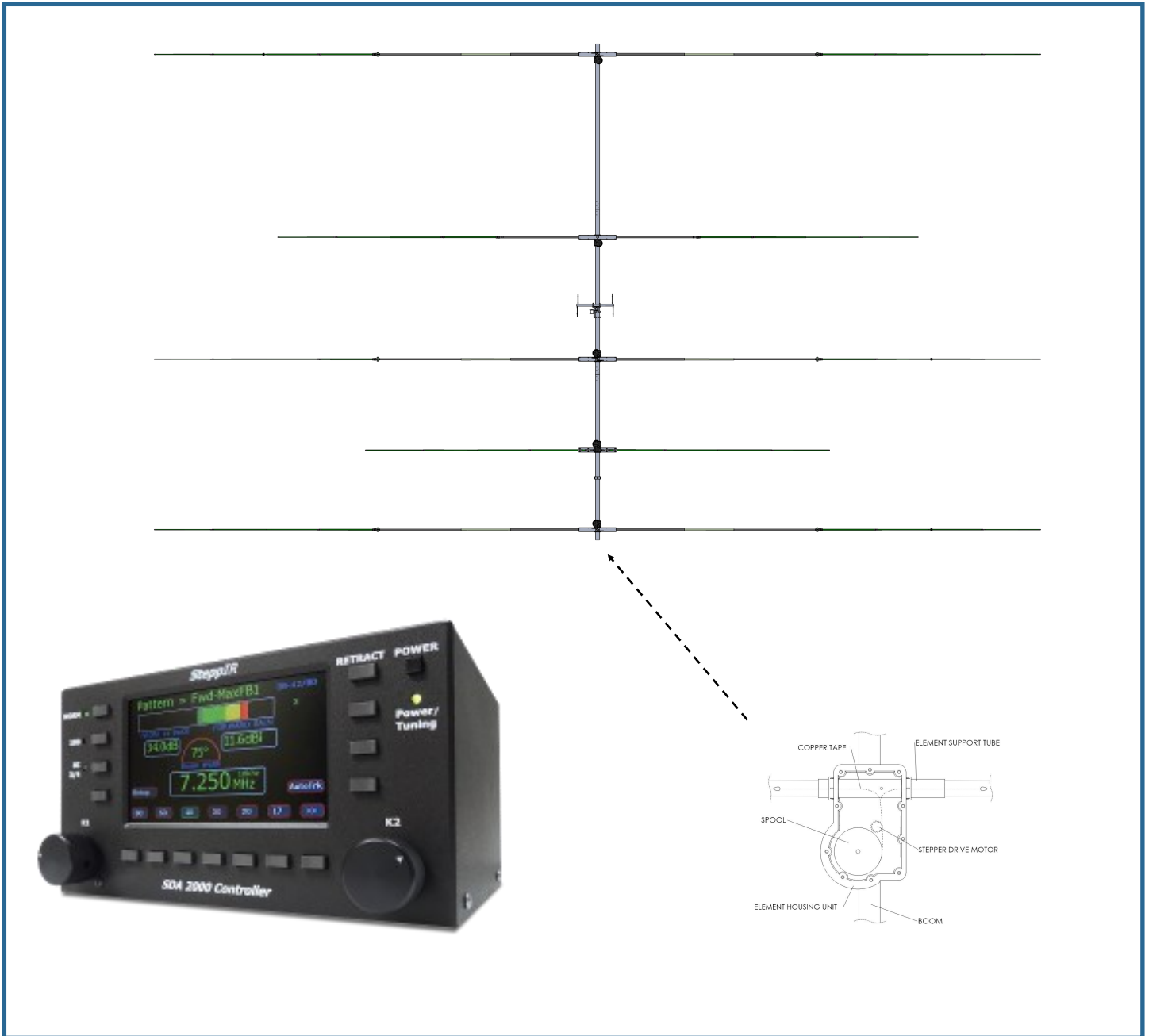


HFT540C Yagi Data Sheet



Description

The HFT series Yagis are an industrial grade antenna solution that can be customized to meet the specific requirements of the user. The HFT series antennas are designed to be heavy-duty in order to withstand difficult conditions, while still offering the utmost in reliability and performance that SteppIR products are well known for.

Our patented system utilizes an electronic controller which remotely adjusts each stepper motor driven antenna element to the exact length required on every frequency within its range— providing optimal performance with none of the compromises that all fixed length antennas require.

HFT540C Yagi Data Sheet

HFT540C Specifications

Frequency coverage	6.8—30 MHz—continuous
Active elements	3 elements 6.8—8.225 MHz; 4 elements 8.225—13.315 MHz; 5 elements 13.315—30 MHz
Element length	Three @ 71.5 ft [21.79 m] one @ 51.5 ft [15.69 m] one @ 37.2 ft [11.33m]
Boom type/length	Aluminum square tube, 4" [10.16 cm]; 40 ft [12.19 m] length
Antenna weight	*415 lb [188 kg] - 485 lb [220 kg] - depends on config.; Does not include boom-to-mast assembly
Truss system	Double truss boom; dual top truss on 71.5 ft / 51.5 ft elements
Antenna tuning system	SDA-2000 commercial electronic controller (US Patent #10,693,211B2) Automatic remote coax switching system; single feed line, relay switched
Wind Load (EIA-222-C)	3.61 m ² [38.88 ft ²]
Wind Rating (EIA-222-C)	110 MPH [161 KPH] - 140 MPH [225 LKPH] - depends on configuration
Turning Radius	41.75 ft [12.73 m]
Power Rating	3KW [50% duty cycle] 1.5 KW [90% duty cycle] (High power ext. balun available)
Mast Hardware	3" [7.62 cm] Aluminum saddles; Mast OD must be 3.00 in / 7.62 cm ; (4.5" custom saddle avail)
Cable Requirements	24 wire 22 ga shielded; Lightning/voltage suppressor highly recommended

Gain / Front-to-Rear / Beamwidth at 130 ft height

Frequency (KHz)	Gain (dBi)	Front to Rear (dB)	Model beamwidth (deg)	Frequency (KHz)	Gain (dBi)	Front to Rear (dB)	Modeled beamwidth (deg)
6800	13.45	25.44	64	16215	16.00	25.01	54
7275	13.36	25.56	64	16940	16.22	25.35	52
7750	13.73	25.32	64	17665	16.13	26.15	52
8225	13.88	25.11	64	18390	16.48	25.26	52
8700	14.19	25.15	64	19115	16.31	25.66	54
9195	14.30	25.34	64	19840	15.93	25.60	56
9690	14.29	25.33	64	20565	15.74	25.23	58
10415	14.14	25.25	64	21290	15.61	25.21	58
11140	14.14	25.29	64	22015	16.54	25.52	50
11865	14.18	25.18	64	22740	16.42	25.40	50
12590	14.35	25.04	64	23465	16.6	25.49	50
13315	14.48	25.35	62	24915	16.93	25.48	50
14040	15.41	25.29	58	26365	17.13	25.36	50
14765	15.65	25.07	56	27815	17.11	25.40	52
15490	16.03	25.49	55	29265	17.18	25.49	52