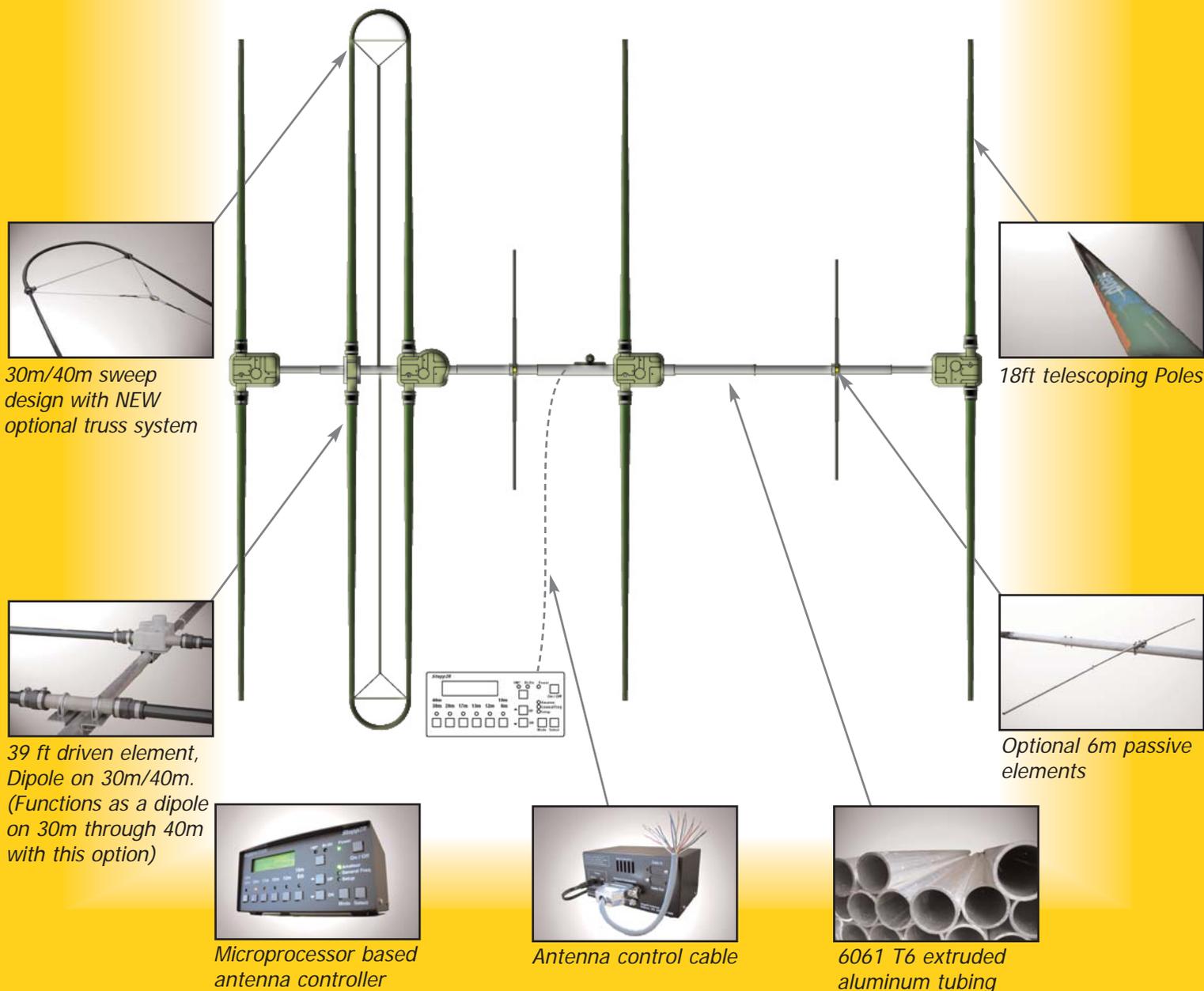


ONE OF SEVEN STEPPIR YAGI ANTENNA CONFIGURATIONS



*4 element with 30M/40M option shown

ONE OF SEVEN STEPPIR YAGI ANTENNA CONFIGURATIONS

- All of our antennas are remotely adjustable with models available covering 3.5MHz - 54 MHz continuously. You can even create your own antenna and store it memory.
- Extremely rugged, our antennas are among the strongest ever built. They can withstand just about anything Mother Nature can dish out.
- Product life tests have shown less than 50% wear factor after 2 million band changes, with zero failures
- Bi-directional mode provides user gain in two directions simultaneously. 180° mode offers nearly instant direction reversal
- All elements are individually adjusted automatically by the microprocessor based controller.
- Gain, F/R, and SWR are optimal at EVERY frequency. SteppIR outperforms virtually every antenna of equal size.
- Easy to assemble and easy to transport when disassembled.

2 Element 6M-40M with 30m/40m adder kit



2 Element 6m-20m

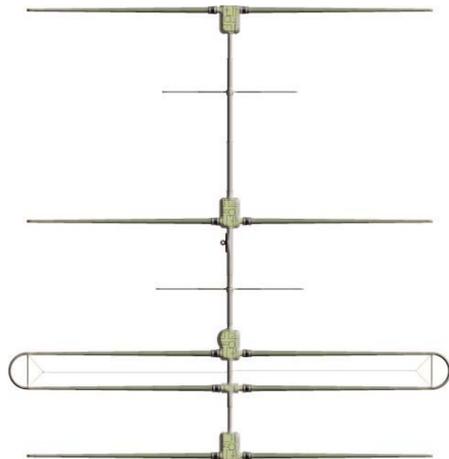


Antenna Specs	2 Element with 30M/40M adder kit	2 Element without 30M/40M adder kit
Weight	37 lb / 16.8 kg	30 lb / 13.6 kg
Wind load	6.0 sq ft / 0.56 sq m	4.0 sq ft / 0.37 sq m
Longest element	39 ft / 11.9 m	36 ft / 10.97 m
Turning radius	20 ft / 6.09 m	18.2 ft / 5.53 m
Boom length	57 in / 1.44 m	57 in / 1.44 m
Mast clamps (incl.)	2.0 in / 5.08 cm	2.0 in / 5.08 cm
Power rating	3 KW	3 KW
Wind rating	100 mph EIA-222-C	100 mph EIA-222-C
Frequency coverage	6.8 MHz – 54 MHz	13.8 MHz – 54 MHz
Cable requirements	12 conductor 22 ga shielded	12 conductor 22 ga shielded
Tuning rate	1.33 ft/sec - .4 m/sec	1.33 ft/sec - .4 m/sec

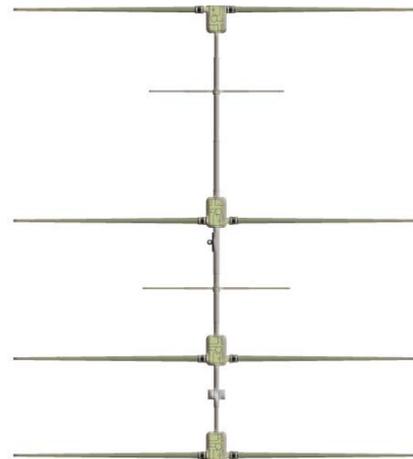
Performance		
Band	dBi Gain	F/R dB
40m	1.8	N/A
30m	2.1	N/A
20m	6.6	21
17m	6.6	16
15m	6.5	13
12m	6.4	11
10m	6.2	9
6m	5.0 (8.3)*	2(20)*

- *with optional passive element kit
- Sketches shown with 6M passives and 30m/40m truss option
- Gain and F/R measured in free space

4 Element 6M-40M with 30m/40m adder kit



4 Element 6m-20m

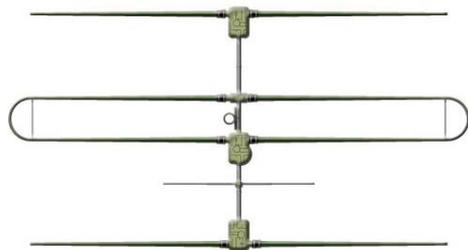


Antenna Specs	4 Element with 30M/40M adder kit	4 Element without 30M/40M adder kit
Weight	106 lb / 48.2 kg	99 lb / 45 kg
Wind load	11.7 sq ft / 1.09sq m	9.7 sq ft / 0.9 sq m
Longest element	39 ft / 11.9 m	36 ft / 10.97 m
Turning radius	24.1 ft / 7.35 m	24.1 ft / 7.35 m
Boom length	32 ft / 9.75 m	32 ft / 9.75 m
Mast clamps (incl.)	2.0 in / 5.08 cm	2.0 in / 5.08 cm
Power rating	3 KW	3 KW
Wind rating	100 mph EIA-222-C	100 mph EIA-222-C
Frequency coverage	6.8 MHz – 54 MHz	13.8 MHz – 54 MHz
Cable requirements	16 conductor 22 ga shielded	16 conductor 22 ga shielded
Tuning rate	1.33 ft/sec - .4 m/sec	1.33 ft/sec - .4 m/sec

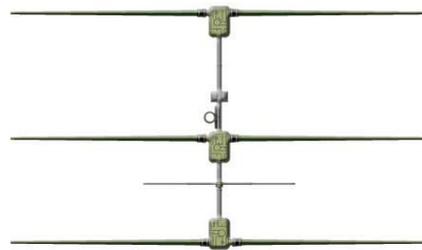
Performance		
Band	dBi Gain	F/R dB
40m	1.8	N/A
30m	2.1	N/A
20m	9.5	21
17m	10.0	20
15m	10.2	27
12m	10.4	21
10m	10.6	11
6m	7.8 (13)*	4(30)*

- *with optional passive element kit
- Sketches shown with 6M passives and 30m/40m truss option
- Gain and F/R measured in free space

3 Element 6M-40M with 30m/40m adder kit



3 Element 6m-20m

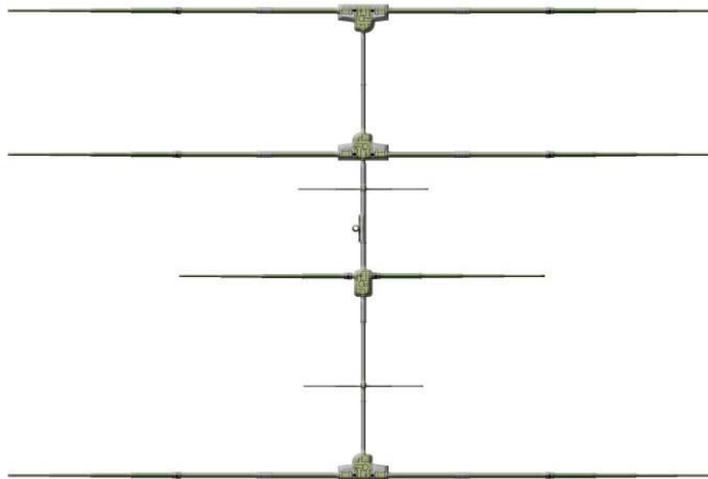


Performance		
Band	dBi Gain	F/R dB
40m	1.8	N/A
30m	2.1	N/A
20m	7.4	25
17m	8.3	25
15m	8.5	20
12m	8.8	15
10m	9.0	11
6m	6.2(10.1)*	4(30)*

- *with optional passive element kit
- Sketches shown with 6M passives and 30m/40m truss option
- Gain and F/R measured in free space

Antenna Specs	3 Element with 30M/40M adder kit	3 Element without 30M/40M adder kit
Weight	58 lb / 26.3 kg	51 lb / 23.1 kg
Wind load	8.1 sq ft / 0.76 sq m	6.1 sq ft / 0.57 sq m
Longest element	39 ft / 11.9 m	36 ft / 10.97 m
Turning radius	19.7 ft / 6 m	19.7 ft / 6 m
Boom length	16 ft / 4.87 m	16 ft / 4.87 m
Mast clamps (incl.)	2.0 in / 5.08 cm	2.0 in / 5.08 cm
Power rating	3 KW	3 KW
Wind rating	100 mph EIA-222-C	100 mph EIA-222-C
Frequency coverage	6.8 MHz – 54 MHz	13.8 MHz – 54 MHz
Cable requirements	12 conductor 22 ga shielded	12 conductor 22 ga shielded
Tuning rate	1.33 ft/sec - .4 m/sec	1.33 ft/sec - .4 m/sec

MonstIR 4 Element 6m-40m



Performance		
Band	dBi Gain	F/R dB
40m	7.6	30
30m	8.5	19
20m	9.3	21
17m	10.0	27
15m	10.2	25
12m	10.2	20
10m	10.5	9.6
6m	7.8 (13)*	4(30)*

- *with optional passive element kit
- Sketches shown with 6m passives
- Gain and F/R measured in free space

Antenna Specs	MonstIR 4 Element
Weight	260 lb / 118.2 kg
Wind load	23.9 sq ft / 2.22 sq m
Longest element	70 ft / 21.5 m
Turning radius	39.7 ft / 12.2 m
Boom length	34 ft / 10.46 m
Mast clamps (incl.)	2.0 in / 5.08 cm
Power rating	3 KW
Wind rating	100 mph EIA-222-C
Frequency coverage	6.8 MHz – 54 MHz
Cable requirements	16 conductor 22 gauge shielded
Tuning rate	1.33 ft/sec - .4 m/sec

Currently, most multi-band antennas use traps, log cells or interlaced elements as a means to cover several frequency bands. All of these methods have one thing in common - they significantly compromise performance. The SteppIR antenna system is our answer to the problem. Resonant antennas, especially yagi's, must be made a specific length to operate optimally on a given frequency. SteppIR antennas have tunable elements that are precisely adjustable by the included controller thus giving optimal performance on all frequencies with a lightweight, compact antenna. The ability to precisely adjust the antenna using computer optimized lengths stored in the controller for every frequency results in stellar performance at every frequency.



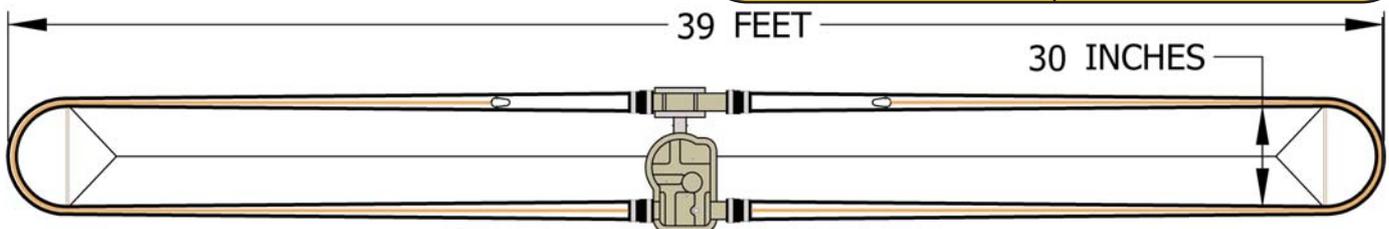
Each antenna consists of two spools of flat copper-beryllium strip conductor mounted in the antenna housing. The strips are perforated to allow a SteppIR 2 element yagi on Peter 1 down in Antarctica stepper motor to drive them simultaneously with a sprocket. Stepper motors are well known for their ability to index very accurately, thus giving very precise control of the antenna length. In addition, the motors are brushless and provide extremely long service life. The copper is driven out into a hollow, lightweight, fiberglass, support element. This allows the controller to adjust the element to any length within the maximum pole length. (36' and 70' for the 20m and 40m models respectively)

The ability to completely retract the copper antenna elements, coupled with the collapsible fiberglass poles makes the entire system extremely portable. The antenna is connected to a microprocessor-based controller (via 22 gauge conductor cable) that offers numerous functions including dedicated buttons for each ham band, continuous frequency selection from 40m to 6m (depending on model chosen), 17 ham and 6 non-ham band memories, 180° direction reversal (allow you to switch directions of the Yagi 180° in just over 3 seconds) or bi-directions mode (simultaneous gain in opposite directions).

30m - 40m DIPOLE OPTION

- Add 40m - 30m dipole capabilities to your SteppIR Yagi, doesn't affect yagi performance on 20M-6M at all.
- High efficiency, patented, linear loading technique allows nearly full-size performance with a 39 foot long element. (60% of full size)
- Only one feed line for 40m-6m operation.
- Solves interaction issues that slopers and other nearby antennas normally cause.
- Only adds two square feet of wind load and 7lbs of weight to our standard yagis.
- Dipole kit can be added to your existing 6m - 20m SteppIR yagi or specified at time of order.

Weight	7.0 lbs / 3.2kg
Windload	2.0 sq ft / .19 sq ft
Gain	1.85 dBi (-.3dBd)
Element length	39 ft / 11.0m



YAGI OPTIONS

- **Transceiver Interface:** Allows the SteppIR controller to automatically track the frequency of the transceiver. You must specify transceiver model.
- **High Wind Kit:** Increases antennas wind survivability to 125mph
- **Element Expansion Kit:**
 - Dipole to 2 Element
 - 2 Element to 3 Element
 - 3 element to 4 Element
- **"Y" Cable:** Allows the use of a logging program and the SteppIR controller simultaneously.
- **6M Passive Element Kit:** The kit contains one or more aluminum elements that greatly enhances 6M performance. (see performance chart on previous page)
- **Array Solutions Surge Suppressors:** Protects the controller from voltage spikes caused by lightning discharge as well as static charge build up.