



Cushcraft

Amateur Radio Antennas

2013 Ham Catalog

*Peak Performance
Beams, Verticals,
Ringos and Yagis
around the globe!*

Cushcraft R-6000 Multiband HF Vertical **6-20 Meters**

The Shape of Things to Come

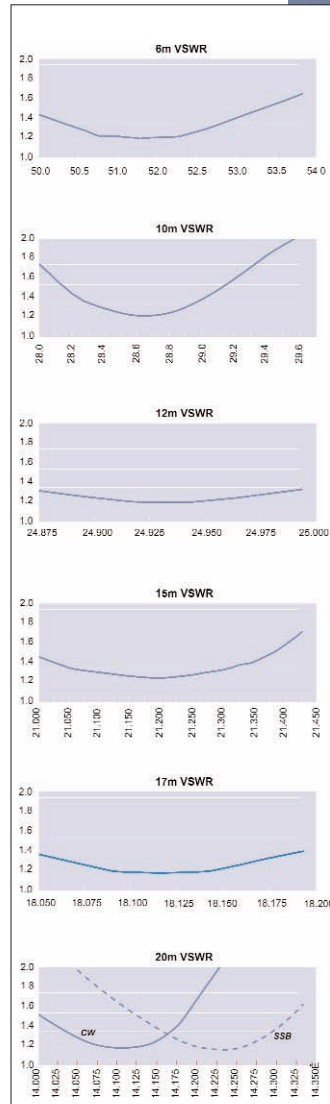
The R-6000 is a 6 through 20 meter, no ground radial antenna. It includes many of the features of the R8, R7 and R5 antennas. R-6000 means excellent performance, easy installation and use, slim silhouette and high reliability. There are no traps used on 6, 10 and 15 meters for maximum efficiency and power handling.

R-6000
\$429⁹⁵

- **EASY INSTALLATION**
For typical use, tuning is not required
- **INSTANT BAND CHANGING**
To any band 6 through 20 Meters
- **SLIM SILHOUETTE**
Gain favor of family and neighbors with the slim, low profile of the R6000
- **6 METER OPERATION**
Join the fun of the “Magic Band” and take advantage of the new HF/50 MHz transceivers
- **AFFORDABLE PRICE**
Cushcraft delivers the best quality and performance at a price no one else can match

Cushcraft

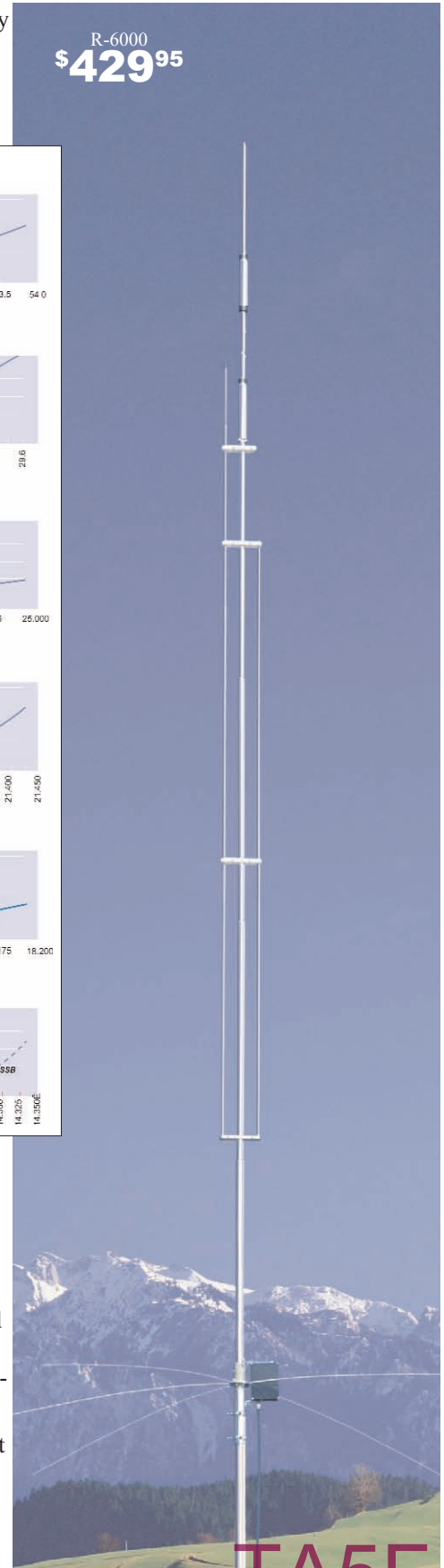
Specifications:	R-6000
Frequency, meters	6, 10, 12, 15, 17, 20
Gain (dBi)	3
VSWR at resonance	1.2:1 typical
2:1 bandwidth, KHz	6m >1300 10m >1700 12m >100 15m >450 17m >100 20m 300
Power Watts PEP (FM)	1500 (500)
Radiation angle, deg.	16
Horizontal rad, deg.	360
Height, ft (m)	20.5 (6.25)
Mast size range, in (cm)	1.5 -1.75 (3.8-4.4)
Wind load, ft2 (m2)	1.5 (.14)
Weight, lb (kg)	16 (6.25)
Shipping Dimensions	7"x 4.5" x 63"



The R-6000 employs quarter wavelength stubs on 10 and 15 Meters to replace standard trap coils. The result is lower loss and wider bandwidth. The R-6000 covers all bands 6 through 15 meters at a VSWR under 2:1. On 20 meters you can select the top 300 KHz or bottom 300 KHz of the band.

The R-6000 weighs only 12-1/2 pounds (5.6 kg). It is lightweight and easy to mount for portable or permanent installations. Machined aluminum clamps and UV stable insulators guarantee years of reliable service. The R-6000 comes with the standard warranty of one year from purchase - plus the industry's leading technical support team stands behind each antenna.

The R-6000 makes an excellent diversity antenna to complement even the most complete stations, or pack up the R-6000 for a trip to the DX location of your dreams.



TA5FA

Cushcraft HF Vertical Antennas

6-80 Meters

*Cushcraft R8 and R9 cover 6, 10, 12, 15, 17, 20, 30, 40 Meters
... and the new R9 expands coverage to
... 80 Meters!*

6-40 Meters

- **NO GROUND RADIALS NEEDED**
- **RUGGED CONSTRUCTION**
- **INSTANT BAND CHANGING**
- **SLIM, LOW PROFILE SILHOUETTE**



R-8
\$539⁹⁵

Cushcraft's world famous R8 now has a big brother!

Big Brother R9 now includes 75/80 Meters for local ragchewing and worldwide low band DX *without radials!*

It's omni-directional low angle radiation gives you exciting and easy DX on all 9 bands: 75/80, 40, 30, 20, 17, 15, 12, 10 and 6 Meters with low SWR. QSY instantly -- no antenna tuner needed.

Use full *1500 Watts* SSB/CW when the going gets tough to break through pileups and poor band conditions.

The R9 is super easy to assemble, installs just about anywhere, and its low profile blends inconspicuously into the background in urban and country settings alike.

Compact Footprint: Installs in an area about the size of a child's sandbox -- no ground radials to bury with all RF-energized surfaces safely out of reach.

Rugged Construction: Thick fiberglass insulators, all-stainless steel hardware and 6063 aircraft-aluminum tubing is double or triple walled at key stress points to handle anything Mother Nature can dish out.

R9 is 31.5 feet tall, 25 lbs. Mounting mast 1.25 to 2 inches. Wind surface area is 4 square feet. Wind survivability is 60 MPH.

R8, \$539.95.

Like R9 antenna but less 75/80 Meters.

R-8TB, \$79.95.

Tilt-base lets you tilt your antenna up and down easily by yourself. Makes it easy to work on by yourself, no need to call your ham buddies over to help take it down and lift back up.

R-8GK, \$56.95.

Three-point guy kit for high winds.

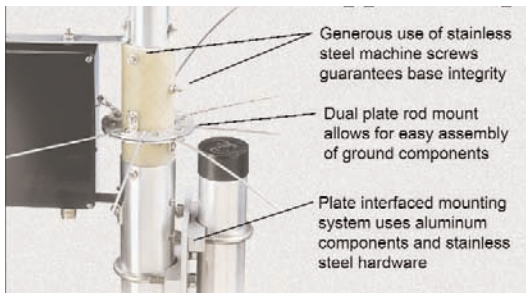


New!

R-9
\$639⁹⁵

Cushcraft

R-8/R-9 Rugged Design

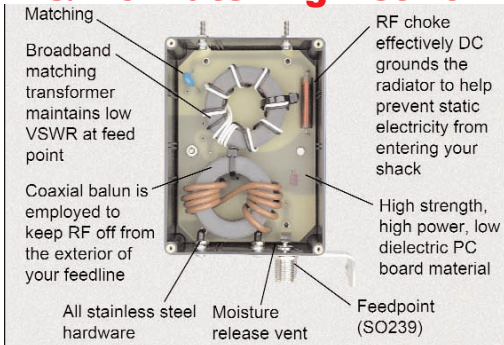


Generous use of stainless steel machine screws guarantees base integrity

Dual plate rod mount allows for easy assembly of ground components

Plate interfaced mounting system uses aluminum components and stainless steel hardware

R-8/R-9 Matching Network



Matching

Broadband matching transformer maintains low VSWR at feed point

Coaxial balun is employed to keep RF off from the exterior of your feedline

All stainless steel hardware

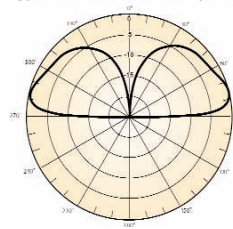
Moisture release vent

RF choke effectively DC grounds the radiator to help prevent static electricity from entering your shack

High strength, high power, low dielectric PC board material

Feedpoint (SO239)

Typical elevation radiation pattern



The R-8 AND R9 provide 360 degree (omni) coverage on the horizon and a low radiation angle in the vertical plane for a better DX.

Specifications	R8	R9
Frequency Meters	6,10,12,15,17,20, 30,40	6,10,12,15,17,20, 30,40,80
Gain (dBi)	3	3
VSWR at resonance	1.3:1 typical	1.3:1 typical
VSWR 2:1 bandwidth, KHz	40M(150) 30M(>50) 20M(>350) 17M(>100) 15M(>450) 12M(>100) 10M(>1500) 6M(>1500)	80M(35) 40M(150) 30M(>50) 20M(>350) 17M(>100) 15M(>450) 12M(>100) 10M(>1500) 6M(>1500)
Power Watts PEP (FM)	1500 (500)	1500 (750)
Radiation angle, deg.	16	16
Horizontal rad., deg.	360	360
Height, ft. (m)	28.5 (8.7)	31.5 (10.7)
Mast size range, in(cm)	1.25-2" (3.18-5.1)	1.25-2" (3.18-5.1)
Wind load, ft2 (m2)	1.5 (.14)	1.5 (.14)
Wind surface area	2.5 sq. ft.(0.23m)	4 sq. ft.(0.33m)
Weight, lb.(kg)	23 (10.5)	25 (12.5)
Shipping Dimensions	3.75x5.25x84.5"	3.75x5.25x84.5"

MA-5VA Five-Band Restricted-Space Vertical Antenna

The MA-5VA delivers superb HF multi-band performance while maintaining a neighbor-friendly low profile. Perfect for roof-mounts, patios, small backyards, condos, and motor homes, this 6.5-pound bantam-weight installs quickly without the “heavy lifting” required of larger antennas. Whether you install it permanently or take it down between operating sessions, you’ll appreciate special features like the MA-5VA’s gust-absorbing fiberglass base, resin-sealed resonator coils, aluminum mast blocks, and all-stainless hardware. Best of all, the MA-5VA is solidly engineered-its “no-radial” OCFD design delivers low SWR and high performance without using exotic matching networks or tuners. Simply connect a radio and you’re ready to work the world! The MA-5VA is the perfect restricted-space DX solution for 20, 17, 15, 12, and 10 meters!

- **Light-weight rugged construction**
- **Rapid breakdown for storage or transport**
- **No exotic matching networks or tuners**
- **Advanced “no radial” OCFD design**

MA5V6M, \$49.95. Six Meter Add-on Kit for MA5VA.

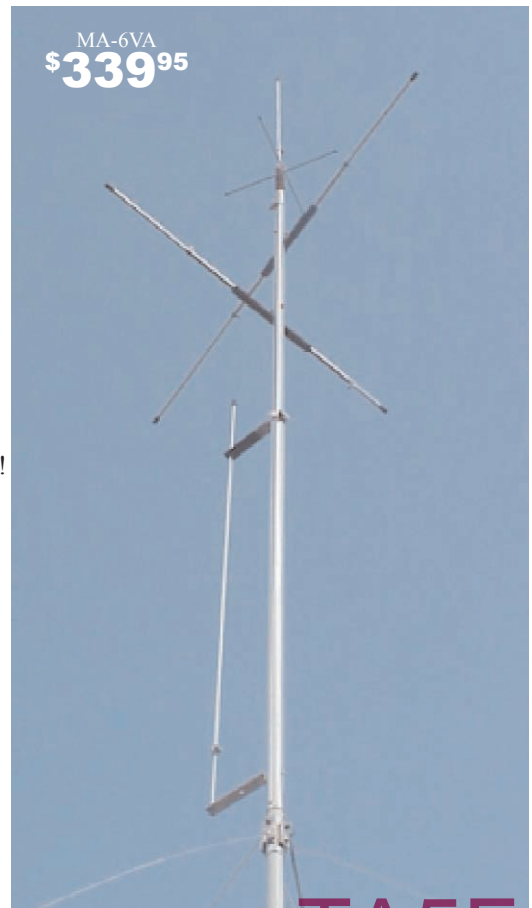
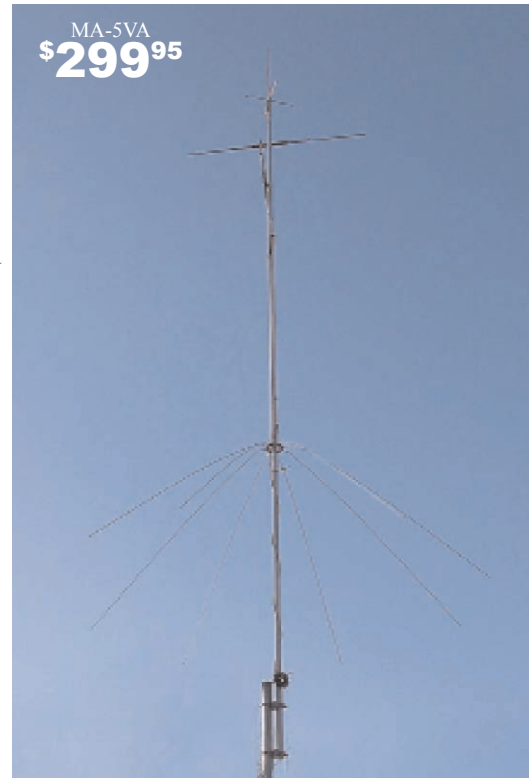
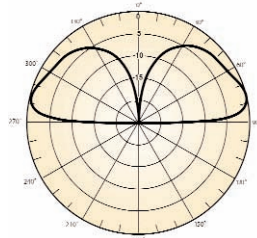
Specifications:	MA5VA	MA6VA
Frequency meters	10, 12, 15, 17, 20	6,10, 12, 15, 17, 20
Gain (dBi)	1-2	1-2
VSWR at resonance	1.2:1 All bands	1.2:1 All bands
Wind surface area	.82 ft ² (.076 m ²)	.82 ft ² (.076 m ²)
Wind Survival, mph	>80	>80
Power Watts PEP. (FM)	250 W (100W)	250 W (100W)
Height, ft (m)	14.7 (4.48)	14.7 (4.48)
Weight, lb (kg)	6.5 (2.95)	6.9 (3.13)
Shipping Dimensions	3"x 3"x 80"-1/2"	3"x 3"x 80"-1/2"

MA-6VA Six-Band Restricted-Space Vertical Antenna

Made for today’s expanded-coverage radios, Cushcraft’s MA-6AV provides the same great versatility and performance of the MA5VA- with the addition of 6 Meters. Enjoy congestion-free FM-repeater operation and explore the world of exotic seasonal band openings on 50 MHz CW and SSB. It’s a great way to add amateur radio’s “magic band” to your operating repertoire!

- **Neighbor-friendly low profile**
- **Rugged light-weight construction**
- **Air-baggage transportable (longest tube is 54")**
- **Robust mounting hardware included**
- **New bandwidth enhancing 8-rod counterpoise**
- **New low loss balun**

Typical elevation radiation pattern



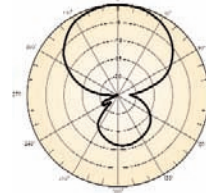
TA5FA

Cushcraft Compact HF Multi-Band Beam **10-20 Meters**

The MA-5B, Compact HF Multi-Band Beam ^{MA-5B} \$499⁹⁵ Small Footprint -- Big Signal

MA-5B, Cushcraft's multiband HF antenna provides 5-Band operation in a package small enough to mount to a tripod. The MA-5B is a design that does not sacrifice ruggedness, performance and power handling for size and ease of installation.

Specifications:	MA5B				
Frequency,Bands	10	12	15	17	20
Elements per Band	2	1	2	1	2
Gain, dBi	5.3	2	4.8	2	3.6
Front to Back Ratio, dB	10	0	12	0	22
Side Lobe Atten. dB	25	20	25	20	25
VSWR 2:1 Bandwidth. KHz	655	>10	225	>100	90
Longest Element, in (cm)	17.1'(52m)	17.1'(52m)	17.1'(52m)	17.1'(52m)	17.1'(52m)
Turning Radius, ft (m)	8.8'(2.7m)	8.8'(2.7m)	8.8'(2.7m)	8.8'(2.7m)	8.8'(2.7m)
Boom Length, ft (m)	7.3'(2.2)	7.3'(2.2)	7.3'(2.2)	7.3'(2.2)	7.3'(2.2)
Boom Diameter, ft (m)	1.5"(3.8cm)	1.5"(3.8cm)	1.5"(3.8cm)	1.5"(3.8cm)	1.5"(3.8cm)
Max. Wind Surface Area	3.22ft ² (3m ²)	3.22ft ² (3m ²)	3.22ft ² (3m ²)	3.22ft ² (3m ²)	3.22ft ² (3m ²)
Max. Power Watts PEP (FM)	1200W (400W)	1200W (400W)	1200W (400W)	1200W (400W)	1200W (400W)
Weight, lb (kg)	26.5 (12)	26.5 (12)	26.5 (12)	26.5 (12)	26.5 (12)

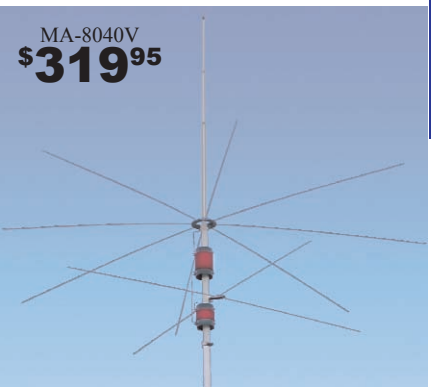


High Front to Back Ratio on 10/15/20 M

Cushcraft Low Frequency Verticals **160 and 80/40 Meters**

MA-8040V 3.5-7.3 MHz Vertical Antenna

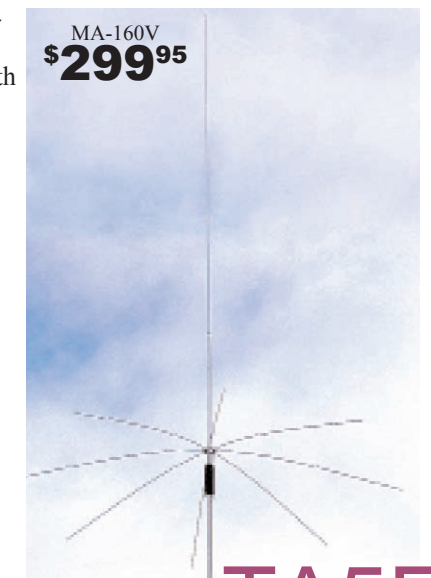
MA-8040V is a compact self-supporting HF vertical that delivers excellent DX-hunting performance on 80 and 40 Meters. Only 27 feet tall and weighing in at less than nine pounds, it is small and light enough for one person to handle easily without assistance. Once installed, the MA-8040V virtually disappears against a backdrop of trees and foliage. Parallel resonators use a combination of inductive and capacitive top loading to deliver automatic band switching, high efficiency, and rock-bottom SWR on both bands. Designed to handle maximum legal power and built to last year after year, it's the perfect DX solution when the sunspots silence the higher bands. Radial kit included.



MA-8040V \$319⁹⁵

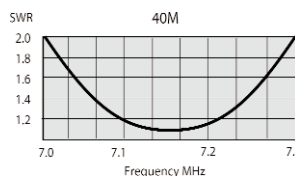
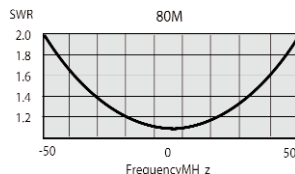
MA-160V 160-Meter Vertical Monopole Antenna

MA-160V is a compact efficient vertical especially designed for working top-band DX from an average-size house lot. A low launch angle and deep overhead null combine to pull in distant stations while rejecting local QRM. The MA-160V features a heavy-duty high-Q copper loading coil plus a wide 100-inch diameter stainless capacitive hat for high efficiency, resiliency and 1500-Watt power handling. An adjustable stinger provides coverage on any 40-kHz segment across the 1.8-2.0 MHz band. Weighing only 12-pounds, the MA-160V installs easily and blends in with backyard trees and vegetation. Each antenna comes with a 400-foot spool of ground-radial wire plus a Danscord™ insulated guying kit.



MA-160V \$299⁹⁵

Specifications:	MA8040V	MA-160V
Frequency MHz (MA8040V Tunable)	3.5-7.0 (80M) 7.0-7.3 (40M)	1.8-2.0
Gain, dBi [radial / dependant]	0 (80M), 2 (40M)	0
Minimum VSWR	1.1:1	1.1:1
Bandwidth (2:1 SWR)	100 KHz (80M) 300 KHz (40M)	40 KHz
Polarization	Linear Vertical	Linear Vertical
Power Handling PEP	1500 W	1500 W
Vertical Height (m)	23'-27' (7-8.2)	30'-36' (12-14)
Weight (antenna only) lbs.(kg)	9.0 (4.1)	12 (5.4)
Mount Style	Mast	Mast
Ground Radials	8 Recommended	8 Recommended



Cushcraft

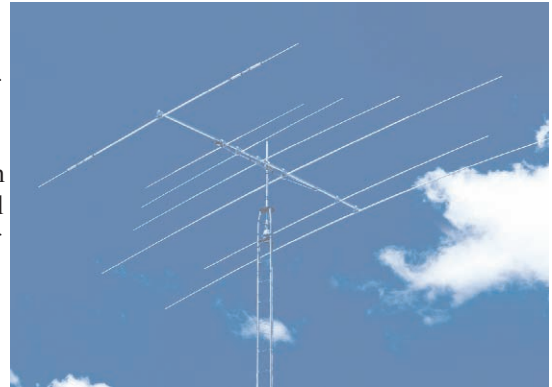
Cushcraft HF Yagis and Log Periodics

10-20 Meters

X-7 BIG THUNDER TRIBANDER YAGI

The X-7 Triband Yagi is geared to set new standards in both radiating performance and mechanical reliability. The product development team has employed the latest computer modeling technology to achieve a superior electrical design as well as elegant new mechanical hardware and assembly techniques. Each mechanical component was designed to 100+ MPH wind survival with a 1.25 safety factor. Traps were eliminated from the high current driven elements and reflectors using the new 4L Log Cell design, which yields virtual monoband performance and maximum power handling capability. Traps are employed only in the lower current directors for increased gain and sharper pattern. The result is a truly high performance antenna which will easily handle the legal limit.

- **New High Efficiency Computer Optimized Design for Maximum Gain and Ultra Clean Radiating Pattern**
- **100+ MPH Construction for Best Reliability and Long Life**
- **NEW 4L Log Cell Driven Elements for better VSWR Bandwidth**
- **Trapless Driven Elements and Reflectors for Reliable Power Handling**

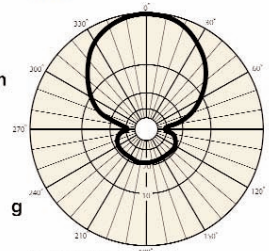


X-7
\$1099⁹⁵

Cushcraft

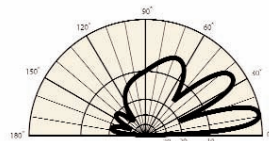
Specifications:	X-740	X7	ALS2010
Frequency Coverage	40 Meters	10, 15, 20 (Meters)	13.5-32 MHz
Number of Elements	1	7	8
Gain, dBi	2	12.5 (20m) @14° 13.0 (15m) @12° 12.9 (10m) @12°	6.4
Front to Back Ratio, dB	30	20	15-20
SWR 2:1 Bandwidth	100 KHz	600 KHz (20m) 750 KHz (15m) 1700 KHz (10m)	18.5 MHz
Longest Element, in (cm)	41 (12.5)	37.2' (11.33)	38 (11.58)
Turning Radius, ft (m)	20.0' (6.09)	20.0' (6.09)	19.25' (5.86)
Boom Length, ft (m)	18' (5.48)	18' (5.48)	18' (5.48)
Wind Load ft ² (m ²)	9.9 (.92)	7.9 (.73)	10.1 (.93)
Max. Power Watts PEP	1500W	1500W	1500W
Weight, lb (kg)	80 (36.3)	60 (27.2)	55 (25.5)

X7

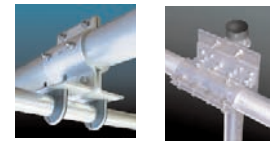


Azimuth

Typical radiation patterns.
Height: One wavelength.
Frequency: 20 M



40-Meter Add-On Kit for X-7 Antenna



X-740
\$369⁹⁵

Add this X-740 kit to your X-7 antenna to get 40-Meter coverage. Step-by-step instructions, quick and easy modification for more band coverage.

LOG PERIODIC

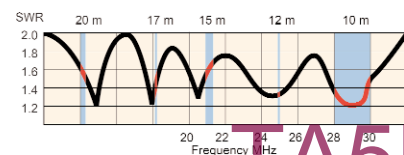
Skylog ASL-2010, 13 - 32 MHz

The ASL-2010 log periodic antenna is the most cost effective, high gain, five band antenna solution on the market today. Skylog offers continuous operation from 13.5 to 32 MHz. Antenna gain and beamwidth are constant for uniform coverage from 10 through 20 meters. The ASL-2010 is rated for continuous duty at full legal power. Skylog is designed for maximum gain on a manageable 18 foot boom with only 10.1 square feet of wind surface area. All stainless steel hardware and rugged element design are only some of the many features that provide years of superior antenna performance. Skylog ASL-2010 is the smart choice for multiband HF operation.

- **Continuous five band coverage 13.5-32 MHz**
- **Constant over entire frequency range**
- **6.4 dBi gain, 65 degree beamwidth**
- **18 foot boom and 19.5 foot turning radius**
- **High efficiency design, antenna stays cool and VSWR steady**



ASL-2010
\$999⁹⁵



Cushcraft VHF/UHF Yagis

Cushcraft HF Monobander

6-2 Meters, 440 MHz

40 Meters



A6270-13S 6 Meter / 2 Meter / 70 CM

XM-240 Big Thunder Monobander

Cushcraft's multiband directional yagi is designed to provide hobbyists who have limited tower or mast space with directional antenna performance on three of the most popular bands. The A6270-13S combines 6 meters, 2 meters and 70 centimeters on one boom. The 2m and 70cm interlaced Yagis are designed to share a common feed line. An independent feed line drives the 6m portion.

Cushcraft's XM-240 monobander utilizes rugged Big Thunder hardware that combined with high strength aluminum tubing affords the antenna outstanding wind survivability. Phillystran boom trusses are used in the XM-240 design for extra boom stability. The unique feed system is a 50 ohm direct feed VSWR is flat across the band. A high power 1:1 balun is included. The XM-240 is field-proven or reliability and performance. Excellent front-to-back ratio and gain makes the XM-240 the right choice for DX and for stacking as well.

- **Outstanding performance thanks to Cushcraft's unmatched multiband design technology and experience.**
- **Rugged stainless steel mounting hardware is easy to install and maintain.**

Specifications:	A627013S		
Frequency MHz	50-54	144-148	430-450
Number of Elements	3	5	5
Gain, dBi	8	10	10
Front to Back Ratio dB	20	20	18
SWR 1.2:1 Typical	>1	>4	>10
2:1 Bandwidth, MHz			
Longest Element, in (cm)	117 (300)	117 (300)	117 (300)
Turning Radius, ft (m)	6.16' (1.87)	6.16' (1.87)	6.16' (1.87)
Boom Length, ft (m)	8.66 (2.66)	8.66 (2.66)	8.66 (2.66)
Wind Load ft ² (m ²)	2.52 (0.23)	2.52 (0.23)	2.52 (0.23)
Max. Power Watts PEP	1000W	350W	350W
Weight, lb (kg)	9.5 (4.3)	9.5 (4.3)	9.5 (4.3)



Element Hardware



Boom-to-Mast

Specifications:	XM240
Frequency MHz	7.0 - 7.3
Number of Elements	2
Gain, dBi	6
Front to Back Ratio, dB	20-25
Side Lobe Atten. dB	>35
VSWR Typical Minimum	1.1:1
Longest Element, in (cm)	43 (13.1)
Turning Radius, ft (m)	24.3 (7.4)
Boom Length, ft (m)	22 (6.7)
Wind Surface Area sq ft (sq m)	5.5 (.51)
Wind Load @ 80 mph, lbs (kg)	142 (64.4)
Max. Power Watts PEP	1500W
Weight, lb (kg):	55 (25)

Cushcraft

Cushcraft 2/6-Meter & HF "SQUALO" Antennas



Cushcraft ASQ-2 **\$119.95** **New!**

Cushcraft's *SQUALO* is a full half-wave, horizontally polarized omni-directional antenna. Outstanding all-around performance is achieved through a 360 degree pattern with no deep nulls. The square shape allows full electrical length in compact dimensions. Direct 52 Ohm Reddi-Match feed provides

ease of tuning and broad band coverage. *Squalo* is well suited for horizontally polarized mobile or fixed operation on SSB, CW, and legacy AM. The omni-directional pattern is great for DX beacons and spotting, and elements may be stacked for added gain. *Squalo* is completely universal for mounting anywhere. Packaged with magnets for vehicle top mounting for 2 and 6 Meters and a horizontal center support for mast or tower mounting. 10, 15, and



Mast-mounted ASQ-10 *Squalo* are ideal for net-control, monitoring or as a general coverage antenna. Minimum SWR. Handles 200 Watts PEP CW/SSB.

Model #	Band	Size (LxW)	Price
ASQ-2	2-Meter	10x10 inches	\$119.95
ASQ-6	6-Meter	30x30 inches	\$139.95
ASQ-10	10-Meter	50x50 inches	\$159.95
ASQ-15	15-Meter	65x65 inches	\$189.95
ASQ-20	20-Meter	100x100 in.	\$229.95

www.cushcraftamateur.com

TA5FA

Cushcraft Multiband HF Yagis

10 - 40 Meters

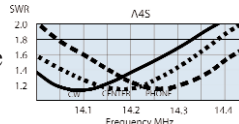
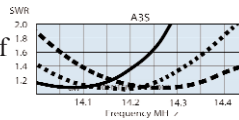
A-4S Four Element Beam - 10, 15 & 20 Meters

A-4S is the true, high performance tribander. Precisely tuned high-power traps, carefully selected element lengths, and proper spacing combine to make the A-4S the preferred antenna for your HF work! This is the premium antenna with all the features that you want. High gain, low SWR, and wide bandwidth keep the contacts coming in. All U-bolts, clamps and hardware are stainless steel. A-4S has pinned boom sections and formed aluminum brackets to keep elements straight in all conditions. Our solid construction keeps the A-4S on the tower! Add 40 meters with A744 kit.



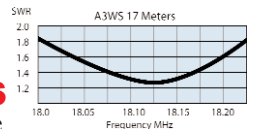
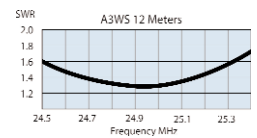
A-3S Three Element Beam - 10, 15 & 20 Meters

A-3 World Ranger, our top selling tribander, has become the A-3S with all stainless steel hardware. It's a real power-house in a small space and lets you work the pile-ups with confidence. All you need is a lightweight tower and rotator to enjoy the benefits of the A-3S. It's a proven performer in DX-peditions and contests. Handles full power from your amp. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware. When space is a premium, but you want benefits of a full-size tribander, A-3S is right for you! Add 40M with A743 kit.



A-3WS WARC Bands 3 Element, 12 & 17M

Enjoy the excitement of the WARC bands with this popular beam. A-3WS gives full performance on 12/17 meters. With the addition of our easy-to-use A-103 add on kit, it will also cover 30 meters. A-3WS needs only a lightweight tower and rotator or mount it above an existing tribander. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware.



Cushcraft

30/40M Add Kits for A-3S/A-4S/A-3WS

40 meters will come alive by adding one of these kits to the dipole of your A-3S or A-4S. Kits include high power traps with heavy wall fiberglass insulator and all hardware. A simple adjustment allows 30 meter operation. For our newest beam, the A3WS, we have a 30 meter add on kit, the A103.

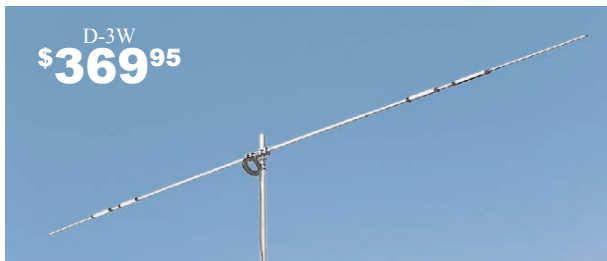
A-743, \$199.95. 7 MHz/10 MHz kit for A-3S;
A-744, \$199.95. 7 MHz/10 MHz kit for A-4S;
A-103, \$199.95. 10 MHz kit for A-3WS.

Specifications:	A743/A744	A743/A744	A103
Band	7 MHz (40 m)	10 MHz (30m)	10 MHz (30m)
Adapter kit, ft (m)	33.19 min. 35.33 max. (10.12-10.77)	27.12 28.4 max. (8.27-8.66)	32.1 (9.8)
Windloading ft2 (m2)	.58 (.05)	.27 (.03)	.45 (.04)
Bandwidth, KHz	125	150	250
Power Rating, Watts	1500 PEP	1500 PEP	1500 PEP
Side Rejection, dB	20	20	20
Weight, lb (kg)	3.44 (1.56)	2.29 (1.04)	3.25 (1.47)

Specifications:	A4S	A3S	A3WS
Frequency MHz	28, 21, 14	28, 21, 14	24, 18
Number of Elements	4	3	3
Gain, dBi	8.9	8.0	8.0
Front to Back Ratio, dB	25	25	25
SWR 1.2:1 Typical, 2:1 Bandwidth, MHz	>500	>500	>300
3 dB Beam Width, Deg E Plane	58	60	60
Longest Element, in (cm)	32 (9.75)	27.75 (8.45)	25.1 (7.66)
Turning Radius, ft (m)	18.4 (5.49)	15.5 (4.72)	14.4 (4.4)
Boom Length, ft (m)	18 (5.48)	14 (4.27)	14 (4.27)
Wind Load, ft ² (m ²)	1.80 (0.17)	4.36 (0.40)	4.1 (0.38)
Mast Size Range, in (cm)	1.25-2.00 (3.18-5.08)	1.25-2.00 (3.18-5.08)	1.25-2.00 (3.18-5.08)
Max. Power Watts PEP(FM)	1500W (1500)	1500W(1500)	1500W(1500)
Weight, lb (kg):	37 (16.8)	27 (12.9)	22.5 (10.2)

Rotatable Dipoles

The World Ranger Dipoles give bi-directional patterns and rotatable convenience. You can mount them high and away from the trees for better performance than a wire dipole. These single and multi-band dipoles feature high-performance traps, heavy wall tubing, and rugged hardware for years of enjoyment.



Specifications:	D40 \$399.95	D4 \$419.95	D3 \$369.95	D3W \$369.95
Frequency MHz	7	28,21,14,7	28,21,14	24,18,10
SWR 1.2:1 Typical, 2:1 Bandwidth, KHz	40>125	>350	>500	>200
Power Rating Watts PEP (CW)	1500 (500)	1500 (500)	1500 (500)	1500 (500)
Length ft (m)	42.25 (12.88)	35.8 (10.92)	25.8 (7.86)	34.0 (10.37)
Mast Size, in(cm):	1.5-2 (3.8-5)	1.5-2 (3.8-5)	1.5-2 (3.8-5)	1.5-2 (3.8-5)
Wind Load, ft2 (m2)	1.3 (.12)	1.3 (.12)	.9 (.08)	.9 (.08)
Weight, lb (kg):	12 (5)	13 (6)	9 (4)	11 (5)

Cushcraft Dual Band Ringos & Yagis

2M/440 MHz

AR-270B 5.5/7.5 dB Dual Band Ringo

This model gives very high gain with a low angle of radiation and it is only 7.7 feet (2.35 m) high. The AR-270B is computer optimized with two 5/8 wavelength collinear elements on 2 meters and four 5/8 wavelength elements on 70 cm. It is broadbanded for minimum SWR on both bands. It is easy to assemble with three rugged aluminum tubing sections, a durable mast mount and factory sealed coils for best performance.

AR-270 3.0/ 5.5 dB Dual Band Ringo

The “Dual Wonder” AR-270 is only 3.75 feet (1.1 meters) high. It has great performance for its size, making it the most popular 2m/70 cm base antenna.

Specifications:	AR270		AR270B	
Frequency MHz	144-148	430-450	144-148	430-450
Gain, dBI	3.0	5.5	5.5	7.5
SWR 1.2:1 Typical	>4	>15	>4	>15
2:1 Bandwidth, MHz				
Horizontal Radiation Pattern, Degrees	360	360	360	360
Height, ft, (m)	3.75 (1.13)		7.7 (2.3)	
Mast Size Range, in	1.25-2 (3.2-5.1)		1.25-2 (3.2-5.1)	
Radial Length, in (cm)	6.75 (17.1)		6.75 (17.1)	
Wind Load, ft2 (m2)	0.27 (0.03)		0.47 (0.044)	
Power, Watts FM	250		250	
Weight, lb (kg)	2 (0.9)		2.4 (1.09)	



Cushcraft

A270-10S and A270-6S 10 and 7.8 dB Dual Band Yagis

Increase your range by selecting one of the new Cushcraft dual band Yagis on 2 meters and 70 cm. You can point the antenna at stations while you are in QSO with them. This will direct more of your output power when transmitting at the same time reducing interference and increasing signal strength when receiving. These antennas are perfect for packet applications. Assembly is a snap with our fully illustrated assembly manuals.

Specifications:	A270-10S		A2706S	
Frequency	VHF	UHF	VHF	UHF
Number of Elements	5		3	
Forward Gain, dBi	10		7.8	
Front to Back Ratio, dB	20	18	20	18
SWR 1.2:1 Typical	³ 4	³ 10	³ 4	³ 20
2:1 Bandwidth, MHz				
Power Rating, Watts PEP:	350		350	
3dB Beamwidth, Degrees				
E Plane:	52		66	
H Plane:	60		108	
Longest Element, in (cm)	40.3 (102.4)		41 (104.1)	
Turning Radius, ft (m)	6 (1.8)		2.8 (.85)	
Boom Length, ft (m)	6.17 (1.9)		2.8 (.85)	
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)		1.25-2 (3.2-5.1)	
Wind Load, ft2 (m2)	.725 (.07)		.3 (.02)	
Weight, lb (kg):	1.8 (.81)		1.7 (.8)	



Cushcraft Ringo Ranger 2 Meters, 220/440 MHz

Ringo Ranger II, Ringo Ranger, Ringo

Ringo Ranger II

The Ringo Ranger II has more gain, less windload, and more mechanical integrity than other two meter antennas. You'll quickly appreciate the benefits of this amazing antenna! Based on the original WIBX Ringo, the Ringo Ranger II is the latest design featuring three 5/8 wave radiating elements and an adjustable 1/8 wave phasing stub. The result is a very low angle of radiation over your coverage area. The Ringo Ranger II has built-in lightning protection, UV-stabilized insulators, heavy wall tubing, improved decoupling radials to eliminate feedline radiation, and all-weather performance.

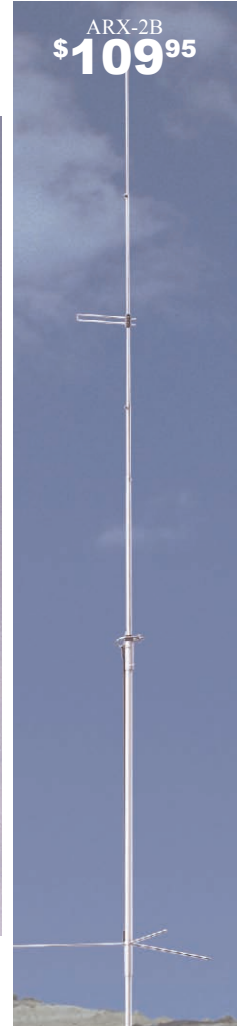
Specifications:	ARX2	ARX2B	ARX220B	ARX450B
Frequency MHz	135-160	135-160	222-225	435-450
SWR 1.2:1 Typical	≥6	>3	>5	>5
2:1 Bandwidth, MHz				
Gain, dBi	5.5	7.0	7.0	7.0
Power Rating, Watt FM	1000	1000	500	500
Radiation Angle, Deg.	16	7	7	7
Horizontal Radiation Pattern, Degrees	360	360	360	360
Radiator Base Dia, in (cm)	5 (12.7)	.75 (1.9)	.75 (1.9)	.50 (1.2)
Height, ft, (m)	12.5 (3.8)	14 (4.3)	9.3 (2.8)	4.9 (1.5)
Mast Size Range, in (cm):	1-1.25 (2.54-3.2)	1.0-1.25 (2.54-3.1)	1.0-1.25 (2.54-3.1)	.75-.88 (1.9-2.22)
Wind Load ft ² (m ²)	.33 (.03)	0.5 (0.05)	0.3 (0.03)	.2 (.02)
Radial Length, in (cm)	20.5 (52.1)	20.5 (52.1)	13.1 (33.7)	6.75 (17.1)
Weight, lb (kg)	4 (1.8)	6 (2.7)	5 (2.3)	1 (.45)

ARX-450B
\$99⁹⁵

ARX-220B
\$114⁹⁵

ARX-2
\$79⁹⁵

ARX-2B
\$109⁹⁵



Cushcraft

Ringo

These are the original WIBX F M Ringos. If you want a combination of compact size, wide bandwidth, a low radiation angle, these economical antennas are just for you. Since radials are not needed, you can even use our Ringos indoors. Our Ringos are 1/2 wave and include built-in lightning protection. Put up one of these easily installed antennas and start enjoying FM!

Specifications:	AR2	AR6	AR10	AR450
Frequency MHz	135-160	50-54	28-29.7	440-460
Gain, dBi	3	3	3	3
Radiation Angle, Deg.	16	16	16	16
Horizontal Radiation Pattern, Degrees:	360	360	360	360
SWR 1.2:1 Typical.	10	2	>1.5	20
2:1 Bandwidth, MHz				
Ring Diameter, in (cm)	5 (12.7)	13 (33)	13 (33)	3.5 (8.9)
Radiator Base Dia, in(cm):	.75 (1.9)	1 (2.5)	1 (2.5)	.5 (1.3)
Height, ft, (m):	3.9 (1.2)	10.1 (3.1)	17.6 (5.36)	1.4 (.43)
Mast Size Range, in (cm)	1-1.25	1-1.25	1-1.25	.75-.88
Wind Load, ft ² (m ²)	.21 (.02)	.37 (.03)	1.68 (.16)	.1 (.01)
Max. Power Watts PEP	1000W	1000W	1000W	500W
Weight, lb (kg):	1.5 (.68)	2.5 (1.1)	4 (1.8)	1 (.45)

AR-450
\$47⁹⁵

AR-2
\$64⁹⁵

AR-6
\$99⁹⁵

AR-10
\$109⁹⁵



Cushcraft VHF/UHF Yagis

2 Meters, 220/440 MHz

A148-20T

2 Meter Hi-Lo Cross Yagi

Here's the antenna that solves multi-mode problems! Ten vertically polarized and ten horizontally polarized elements provide 11.1 dBi gain covering 144-148 MHz. The horizontal elements handle your CW and SSB needs, while the vertical elements cover FM. Hardware is stainless steel. Separate coax feeds allow polarization changes.



A224WB

220 MHz Widebands

This 222 MHz 4 element beam is perfect for Packet, FM repeaters, or sideband/CW. It can be mounted for vertical or horizontal polarization.



A449-6S/A449-11S

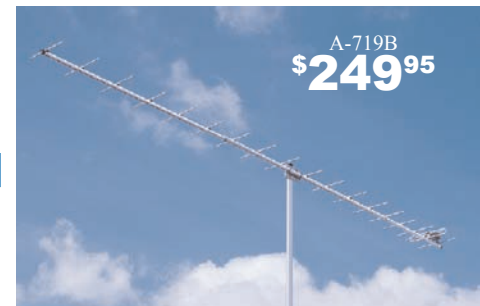
440 MHz Beams

Use one of these 440 MHz beams for your FM/ Packet needs. Both work great for vertical or horizontal polarization.



Specifications:	A224WB	A14820T
Frequency MHz	222-225	144-148
Number of Elements	4	10/10
Forward Gain, dBi	10.2	13
Front to Back Ratio, dB	20	24
SWR 1.2:1 Typical		
2:1 Bandwidth, MHz	>5	>4
Power Rating, Watts PEP (FM)	1500 (750)	1000 (500)
3dB Beamwidth, Degrees		
E Plane	60	45
H Plane	88	50
Side Lobe Attenuation, dB E Plane	40	40
Boom Length, ft (m)	3 (.91)	11 (3.4)
Electrical Wavelength	0.5	1.6
Longest Element, in (cm)	26.7 (68)	40.6 (103)
Turning Radius, ft (m)	3 (.91)	7.5 (2.3)
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)
Wind Load, ft2 (m2)	.23 (.021)	0.39(0.11)
Weight, lb (kg)	1.7 (.77)	7 (3.15)

Cushcraft



A719B

FM, CW and SSB 15.5 dBi

Looking for an antenna to enhance performance on all modes of the 70 CM band? The 13.5 foot long 719B is the right choice. Mount it vertical for FM or horizontal for CW and Sideband. The A-719B joins the 2 meter A-13B2 as a classic for improved performance.

Specifications:	A719B \$249 ⁹⁵	A43011S \$119 ⁹⁵	A4496S \$79 ⁹⁵	A44911S \$119 ⁹⁵
Frequency MHz	430-450	430-440	440-450	440-450
Number of Elements	19	11	6	11
Forward Gain, dBi	15.5	13.2	10.5	13.2
Front to Back Ratio, dB	25	20	18	20
SWR 1.2:1 Typical				
2:1 Bandwidth, MHz	20	>10	>10	>10
Power Rating, Watts PEP	2000	350	350	350
3dB Beamwidth, Degrees				
E Plane	24	48	60	48
H Plane	19			
Side Lobe Atten.,dB,E Plane	60	40	30	40
Boom Length, ft (m)	13.5 (4.1)	4.6 (1.39)	2.9 (0.89)	4.4 (1.35)
Connector Type	N	UHF	UHF	UHF
Longest Element, in (cm)	13.75 (34.9)	14 (35)	13 (33)	13 (33)
Turning Radius, ft (m)	7.25 (2.2)	2.8 (.85)	2.9 (.89)	2.8 (.85)
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)	1.25-1.5 (3.2-5.1)	1.25-2.0 (3.2-5.1)	1.25-1.5 (3.2-5.1)
Wind Load, ft2 (m2)	1.2 (.11)	0.42 (0.04)	0.30 (0.03)	0.39 (0.04)
Weight, lb (kg)	5.6 (2.55)	4 (1.8)	3 (1.4)	4 (1.8)

Cushcraft Boomer Sideband VHF/UHF Yagis **2 Meters**

A13B2 -13 Element Wideband Boomer

The A13B2 is as versatile as the A-17B2 is specialized. A13B2 will be your choice for high performance across the entire 2 meter band. New and experienced hams will enjoy 15.8 dBi gain on FM, packet, CW, or sideband across the 4 MHz operating range. The A13B2 is easily mounted vertically or horizontally for maximum performance on your favorite mode. Its optimum boom length makes it a popular antenna that fits just about anywhere. The new UltraMatch balanced feed on the A13B2 provides a 50 Ohm match via a standard SO-239 UHF female connector. Model A13B2N has N connector.

A17B2 - 17 Element CW/SSB Boomer

The serious two meter operator who is interested in EME, aurora, scatter, SSB, CW, tropo etc, will choose the A17B2. It has 17 elements on a 4.5 wavelength boom. Our computer-aided design supported by precise test range data and the latest manufacturing technology gives you a cleaner pattern and 18 dBi gain in this long boom design. Significant enhancement is provided by the new UltraMatch balanced feed system with N-connector.

The UltraMatch is a modified T-match system that provides a balanced current distribution on your Boomer. It uses UltraLink Teflon[®] dielectric cable allowing for low loss high power applications. UltraMatch is completely enclosed for weather proofing. UltraMatch features an N-connector on the A17B2 and UHF SO239 on the A13B2. When all-weather performance is important, you will choose the new UltraMatched Boomers everytime.

A26B2 - 26 Element Wideband Boomer

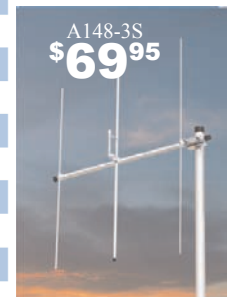
This antenna offers the highest gain of any 2 meter FM antenna in the world. The A26B2 includes 2 complete A-13B2 antennas, stacking boom and phasing harnesses.

A124WB - 4 Element Wideband Boomer

This is the right choice for packet systems and other applications requiring a dedicated directional antenna.

A148-10S & A148-3S 2M Yagis

These antennas are the newest computer optimized models of our 2 meter Yagis. We have improved both the pattern and gain to give you better FM coverage. The A148-3S is the low priced quality leader for Packet, FM or even portable use. It is easily rear mounted. A148-10S is one of our best value designs with excellent gain and front-to-back ratio. Use it for long range FM or full band 2 meter operation.



Cushcraft

Specifications:	A13B2	A17B2	A124WB	A26B2	A1483S	A14810S
Frequency MHz	144-148	144-145	144-148	144-148	144-148	144-148
Elements per Band	13	17	4	26	3	10
Gain, dBi	15.8	18.0	10.2	17	7.8	13.2
Front to Back Ratio, dB	26	26	19	26	18	24
Side Lobe Atten. dB	>60	>60	40	>60		
SWR 1.2:1 Bandwidth MHz	>4	>2	4	>4	>5	³ 4
Longest Element, in (cm)	39.75 (101)	40.75 (103.5)	40.75 (104)	39.75 (101)	41 (104.1)	40.3 (102.4)
Turning Radius, ft (m)	8.9 (2.7)	17.25 (5.26)	4 (1.22)	10.4 (3.18)	2.8 (.8)	6 (1.8)
Boom Length, ft (m)	15 (4.57)	31 (9.45)	4 (1.22)	15 (4.57)	2.8 (.85)	12 (3.6)
Electrical Wavelength	2.2	4.5	.5	2.2		
Wind Load ft ² (m ²)	1.8 (.17)	3.9 (.36)	.34 (.034)	4.84 (.45)	.27 (.02)	1.21 (.11)
Max. Power Watts PEP	1500W	1500W	1500W	1500W	1000W	1000W
Weight, lb (kg)	6.7 (.31)	15.75 (7.14)	3 (1.36)	21.5 (9.75)	1.5 (.7)	6 (2.7)

Power Divider Harness for Boomers

Our power dividers make it a snap to stack Cushcraft Boomers. Just add equal lengths of 50-Ohm coax to each of the antenna feed points.



- PD-2, \$69.95. For two A13B2 beams.
- PD-4, \$89.95. For four A13B2 beams.
- PD-2N, \$79.95. For two A17B2 beams.
- PD-4N, \$99.95. For four A17B2 beams.

Stacking Kits for Cushcraft Boomers

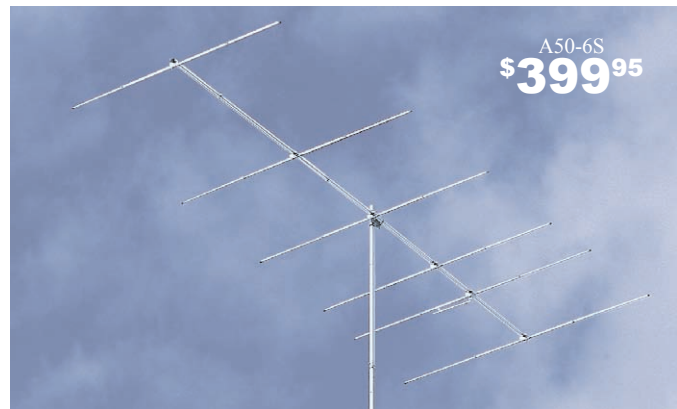
Make stacking your Cushcraft Boomers easy. Choose the Boomer Stacking Kits for your installation. Each stacking kit includes: Stacking Aluminum boom, Power Dividers wire harness and mounting hardware.
Order P/N: A26B2-VPK, \$169.95 for two A13B2 Boomers.
Order P/N: A26B2N-VPK, \$189.95 for two A17B2 Boomers.
Order two kits for stacking 4 Boomers.

Cushcraft 6 and 10 Meter Yagis

6-10 Meters

6 Meter Yagis - SSB/CW/FM

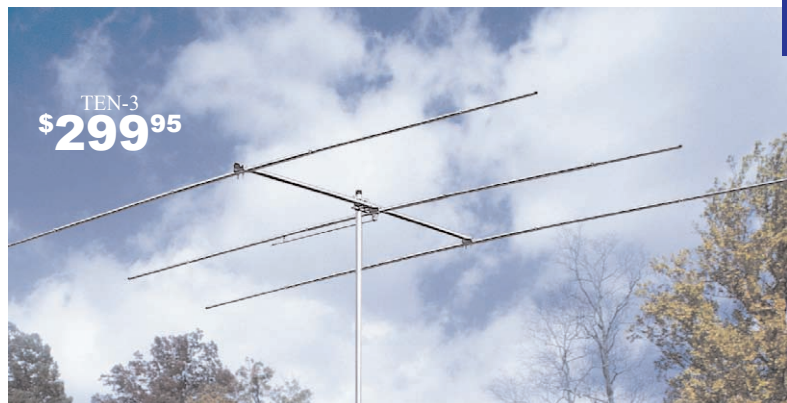
Computer-aided modeling and test range techniques were used by Cushcraft engineers to further optimize the performance of our popular 6 meter Yagis. This process means more gain and cleaner patterns with excellent front-to-back ratios. S-models have very broad bandwidth so they will not detune in bad weather. They feature stainless steel hardware for long trouble-free life. Enjoy the new popularity and exciting contacts on the 6 meter band with one of the S-series Laird Yagis. The A50-3S, A50-5S and A50-6S may be mounted vertically for FM use.



Cushcraft

TEN-3 10 Meter Yagi

Looking for a lightweight, economical alternative to the 10 meter big boys? Choose the TEN-3. Although it's popular with novices and technicians, this antenna is for any ham who wants more gain with a good front to back ratio on 10 meters. This antenna has an 8 foot boom (2.4m) making it easy to install on a very simple mount with only a light rotator. The matching system is our proven Reddi-Match for 50 Ohm no balun feed and SO-238 connector. Make more positive contacts with the TEN-3.



Specifications:	A503S	A505S	A50-6S	TEN3
Frequency MHz	50-54	50-54	50-54	28-29.7
Number of Elements	3	5	6	3
Gain, dBi	8	10.5	11.6	8
Front to Back Ratio, dB	20	24	26	25
Side Lobe Atten. dB	25	25	25	25
SWR 1.2:1 Typical. 2:1 Bandwidth, MHz	>1	>1	>1	>1.5
Longest Element, in (cm)	117 (300)	123 (312)	119 (302)	18 (5.49)
Turning Radius, ft (m)	6' (1.8)	7.8' (2.37)	11.5' (3.5)	9.8' (3.0)
Boom Length, ft (m)	6' (1.8)	12' (3.7)	20' (6.1)	8' (2.44)
Wind Load, ft ² (m ²)	1.80 (0.17)	2.9 (0.273)	4.46 (.41)	2.0 (.20)
Max. Wind Surface Area	3.22ft ² (3m ²)	3.22ft ² (3m ²)	3.22ft ² (3m ²)	3.22ft ² (3m ²)
Max. Power Watts PEP	1000W	1000W	1000W	1500W
Weight, lb (kg):	7 (3.2)	11 (5.0)	18 (8.2)	9.9 (4.45)

Cushcraft Amateur Information

Cushcraft antennas are designed to survive 80 MPH winds unless otherwise noted. Stainless steel hardware and high-grade seamless 6063-T832 tubing are used in all antennas. Cushcraft antennas are distributed by many fine dealers worldwide. For dealers in the USA, Canada and other countries, please contact Cushcraft.
Sales: Cushcraft Amateur Antennas, 308 Industrial Park Road, Starkville, MS 39759 USA.
Phone: 662-323-5803. **Fax:** 662-323-5803.
Email: cushcraft@mjenterprises.com
Warranty: Cushcraft antennas carry a one year limited warranty.
Information: Visit our website: cushcraftamateur.com for additional information. FREE download of Instruction manuals.
Service: Return product to: Cushcraft Antennas, 308 Industrial Park Road, Starkville, MS 39759 USA.
Replacement Parts: To purchase or obtain warranty replacement parts, contact the Cushcraft factory at above address and phone/fax numbers.