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If your company provides products or services of interest to our readers,
please contact the ARRL Advertising Department today for information on building your business.

MFJ 1.8-170 MHz SWR Analyzer™

Reads complex impedance . . . Super easy-to-use

New MFJ-259B reads antenna SWR . . . Complex RF Impedance: Resistance(R) and Reactance(X) or Magnitude(Z) and Phase(degrees) . . . Coax cable loss(dB) . . . Coax cable length and Distance to fault . . . Return Loss . . . Reflection Coefficient . . . Inductance . . . Capacitance . . . Battery Voltage. LCD digital readout . . . covers 1.8-170 MHz . . . built-in frequency counter . . . side-by-side meters . . . Ni-Cad charger circuit . . . battery saver . . . low battery warning . . . smooth reduction drive tuning . . . and much more!

The world's most popular SWR analyzer just got incredibly better and gives you more value than ever!

MFJ-259B gives you a complete picture of your antenna's performance. You can read antenna SWR and Complex Impedance from 1.8 to 170 MHz.

You can read Complex Impedance as series resistance and reactance ($R+jX$) or as magnitude (Z) and phase (degrees).

You can determine velocity factor, coax cable loss in dB, length of coax and distance to a short or open in feet.

You can read SWR, return loss and reflection coefficient at any frequency simultaneously at a single glance.

You can also read inductance in μH and capacitance in pF at RF frequencies.

Large easy-to-read two line LCD screen and side-by-side meters clearly display your information.

It has built-in frequency counter, Ni-Cad charger circuit, battery saver, low battery warning and smooth reduction drive tuning.

Super easy to use! Just set the bandswitch and tune the dial -- just like your transceiver. SWR and Complex Impedance are displayed instantly!

Here's what you can do

Find your antenna's true resonant frequency. Trim dipoles and verticals.

Adjust your Yagi, quad, loop and other antennas, change antenna spacing and height and watch SWR, resistance and reactance change instantly. You'll know exactly what to do by simply watching the display.

Perfectly tune critical HF mobile antennas in seconds for super DX -- without subjecting your transceiver to high SWR.

Measure your antenna's 2:1 SWR bandwidth on one band, or analyze multiband performance over the entire spectrum 1.8-170 MHz!

Check SWR outside the ham bands without violating FCC rules.

Take the guesswork out of building and adjusting matching networks and baluns.

Accurately measure distance to a short or open in a failed coax. Measure length of a roll of coax, coax loss, velocity factor and impedance.

Measure inductance and capacitance. Troubleshoot and measure resonant frequency and approximate Q of traps, stubs, transmission lines, RF chokes, tuned circuits and baluns.

Adjust your antenna tuner for a perfect 1:1 match without creating QRM.

And this is only the beginning! The



Call your favorite dealer for your best price!

MFJ-259B
\$259⁹⁵

MFJ-259B is a complete ham radio test station including -- frequency counter, RF signal generator, SWR Analyzer™, RF Resistance and Reactance Analyzer, Coax Analyzer, Capacitance and Inductance Meter and much more!

Call or write for Free Manual

MFJ's comprehensive instruction manual is packed with useful applications -- all explained in simple language you can understand.

Take it anywhere

Fully portable, take it anywhere -- remote sites, up towers, on DX-peditions. It uses 10 AA or Ni-Cad batteries (not included) or 110 VAC with MFJ-1312D, \$14.95. Its rugged all metal cabinet is a compact 4x2x6 3/4 inches.

How good is the MFJ-259B?

MFJ SWR Analyzers™ work so good, many antenna manufacturers use them in their lab and on the production line -- saving thousands of dollars in instrumentation costs! Used worldwide by professionals everywhere.

More MFJ SWR Analyzers™

MFJ-249B, \$229.95. Like MFJ-259B, but reads SWR, true impedance magnitude and frequency only on LCD. No meters.

MFJ-209, \$139.95. Like MFJ-249B but reads SWR only on meter and has no LCD or frequency counter.

MFJ-219B, \$99.95. UHF SWR Analyzer™ covers 420-450 MHz. Jack for external frequency counter. 7 1/2 x 2 1/2 x 2 1/4 inches. Use two 9 volt batteries or 110 VAC with MFJ-1312D, \$14.95. Free "N" to SO-239 adapter.

SWR Analyzer Accessories

Dip Meter Adapter

MFJ-66, \$19.95. Plug a dip meter coupling coil into your MFJ SWR Analyzer™ and turn it into a sensitive and accurate bandswitched dip meter. Save time and take the guesswork out of winding coils and determining resonant frequency of tuned circuits and Q of coils. Set of two coils cover 1.8-170 MHz depending on your SWR Analyzer™.

Genuine MFJ Carrying Case

MFJ-29C, \$24.95. Tote your MFJ-259B anywhere with this genuine MFJ custom carrying case. Has back pocket with security cover for carrying dip coils, adaptors and accessories.

Made of special foam-filled fabric, the MFJ-29C cushions blows, deflects scrapes, and protects knobs, meters and displays from harm.

Wear it around your waist, over your shoulder, or clip it onto the tower while you work -- the fully-adjustable webbed-fabric carrying strap has snap hooks on both ends.

Has clear protective window for frequency display and cutouts for knobs and connectors so you can use your MFJ SWR Analyzer™ without taking it out of your case. Look for the MFJ logo for genuine authenticity!

MFJ-99, \$54.85. Accessory Package for MFJ-259B/249B/209. Includes genuine MFJ-29C carrying case, MFJ-66 dip meter adapter, MFJ-1312D 110Vac adapter. **Save \$5!**

New! Tunable Measurement Filter™
MFJ-731, \$89.95. Exclusive MFJ tunable RF filter allows accurate SWR and impedance measurements 1.8 to 30 MHz in presence of strong RF fields. Has virtually no effect on measurements. Works with all SWR Analyzers.

MFJ No Matter What™ warranty

MFJ will repair or replace (at our option) your MFJ SWR Analyzer™ for one full year.

Free MFJ Catalog
Nearest Dealer . . . 800-647-1800

<http://www.mfjenterprises.com>

• 1 Year No Matter What™ warranty • 30 day money back guarantee (less s/h) on orders from MFJ

MFJ ENTERPRISES, INC.
Box 494, Miss. State, MS 39762
(662) 323-5869; 8-4:30 CST, Mon.-Fri.
FAX: (662) 323-6551; Add s/h
Tech Help: (662) 323-0549

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MFJ-224
\$159⁹⁵ MFJ 2 Meter FM SignalAnalyzer™

Measure signal strength over 60 dB range, check and set FM deviation, measure antenna gain, beamwidth, front-to-back ratio, sidelobes, feedline loss in dB. Plot field strength patterns, position antennas, measure preamp gain,

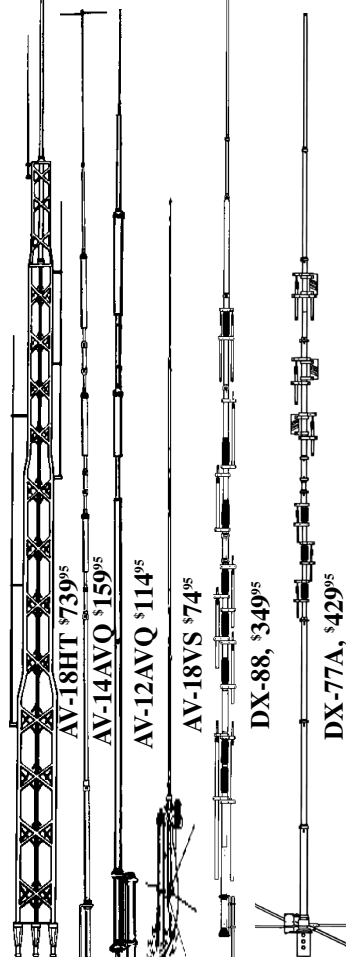
detect feedline faults, track down hidden transmitters, tune transmitters and filters. Plug in scope to analyze modulation wave forms, measure audio distortion, noise and instantaneous peak deviation. Covers 143.5 to 148.5 MHz. Headphone jack, battery check function. Uses 9V battery. 4x2 1/2 x 6 1/4 in.

More hams use MFJ SWR Analyzers™ than any others in the world!

hy-gain® HF VERTICALS...

Self-supporting -- no guys required . . . Remarkable DX performance -- low angle radiation, omnidirectional . . . Handles 1500 Watts . . . Low SWR . . . Automatic band switching . . . Aircraft quality aluminum tubing . . . Stainless steel hardware . . . Recessed SO-239 connector . . . Two year limited Warranty . . .

Free Manuals!



hy-gain® Classics

All hy-gain multi-band vertical antennas are entirely self supporting -- no guys required.

They offer remarkable DX performance with their extremely low angle of radiation and omnidirectional pattern.

All handle 1500 Watts PEP SSB, have low SWR, automatic band-switching (except AV-18VS) and include a 12-inch heavy duty mast support bracket (except AV-18HT).

Heavy duty, slotted, tapered swaged, aircraft quality aluminum tubing with full circumference

compression clamps is used for radiators.

Includes all stainless steel hardware.

Recessed SO-239 prevents moisture damage.

Hy-gain verticals go up easily with just hand tools and their cost is surprisingly low.

Two year limited warranty.

AV-18HT, \$739.95. (10, 12, 15, 20, 40, 80 Meters, 160 Meters optional). 53 ft., 114 lbs.

Standing 53 feet tall, the famous Hy-Gain HyTower is the world's best performing vertical! The AV-18HT features automatic band selection achieved through a unique stub-decoupling system which effectively isolates various sections of the antenna so that an electrical 1/4 wavelength (or odd multiple of a 1/4 wavelength) exists on all bands.

Approximately 250 kHz bandwidth at 2:1 VSWR on 80 Meters. With the addition of a base loading coil (LC-160Q, \$99.95), it also provides exceptional 160 Meter performance.

The 24 foot tower is all rugged, hot-dip galvanized steel and all hardware is iridized for corrosion resistance. Special tilt-over hinged base for easy raising and lowering.

AV-14AVQ, \$159.95. (10,15,20,40 Meters).

18 ft., 9 lbs. The Hy-Gain AV-14AVQ uses the same trap design as the famous Hy-Gain Thunderbird beams. Three separate air dielectric Hy-Q traps with oversize coils give superb stability and 1/4 wave resonance on all bands. Roof mount with Hy-Gain AV-14RMQ kit, \$79.95.

AV-12AVQ, \$114.95. (10, 15, 20 Meters).

13 ft., 9 lbs. The AV-12AVQ also uses Thunderbird beam design air dielectric traps for extremely Hy-Q performance. This is the way to go for inexpensive tri-band performance in limited space. Roof mount with AV-14RMQ kit, \$79.95.

AV-18VS, \$74.95. (10,12,15,17,20,30,40,80 Meters). 18 ft., 4 lbs. High quality construction and low cost make the AV-18VS an exceptional value. Easily tuned to any band by adjusting feed point at the base loading coil. Roof mount with Hy-Gain AV-14RMQ kit, \$79.95.

DX-88, \$349.95. (10, 12, 15,17,20,30,40,80 Meters, 160 Meters optional). 25 ft., 18 lbs.

All bands are easily tuned with the DX-88's exclusive adjustable capacitors. 80 and 40 Meters can even be tuned from the ground without having to lower the antenna. Super heavy-duty construction. DX-88 OPTIONS: 160 Meter add-on kit, KIT-160-88, \$179.95. Ground Radial System, GRK-88, \$81.95. Roof Radial System, RRK-88, \$89.95.

DX-77A, \$429.95. (10, 12, 15, 17, 20, 30, 40 Meters). 29 ft., 25 lbs. No ground radials required! Off-center-fed Windom has 55% greater bandwidth than competitive verticals. Heavy-duty tiltable base. Each band independent

Model #	Price	Bands	Max Power	Height	Weight	Wind Surv.	Rec. Mast
AV-18HT	\$739.95	10,15,20,40,80	1500 W PEP	53 feet	114 pounds	75 MPH	-----
AV-14AVQ	\$159.95	10,15,20,40	1500 W PEP	18 feet	9 pounds	80 MPH	1.5-1.625"
AV-12AVQ	\$114.95	10/15/20 M	1500 W PEP	13 feet	9 pounds	80 MPH	1.5-1.625"
AV-18VS	\$74.95	10 - 80 M	1500 W PEP	18 feet	4 pounds	80 MPH	1.5-1.625"
DX-88	\$349.95	10 - 40 M	1500 W PEP	25 feet	18 pounds	75 mph no guy	1.5-1.625"
DX-77A	\$429.95	10 - 80 M	1500 W PEP	29 feet	25 pounds	60 mph no guy	1.5-1.625"

hy-gain® PATRIOT

Hy-Gain's new **PATRIOT** HF verticals are the best built, best performing and best priced multiband verticals available today. For exciting DX make full use of your sunspot cycle with the **PATRIOT's** low 17 degree angle signal.

No ground or radials needed
Effective counterpoise replaces radials and ground.

Automatic bandswitching
Single coax cable feed. Each band is individually tunable. Extra wide VSWR bandwidth. End fed with broadband matching unit.

Sleek and low-profile
Low 2.5 sq. ft. wind surface area. Small area required for mounting. Mounts easily on decks, roofs and patios.

Full legal limit
Handles 1500 Watts key down continuous for two minutes.

Built-to-last
High wind survival of 80 mph. Broadband matching unit made from all Teflon® insulated wire. Aircraft quality aluminum tubing, stainless steel hardware.

hy-gain® warranty
Two year limited warranty. All replacement parts in stock.

AV-640, \$359.95. (6,10,12, 15,17,20,30,40 Meters). 25.5 ft., 17.5 lbs. The AV-640 uses quarter wave stubs on 6, 10, 12 and 17 meters and efficient end loading coil and capacity hats on 15, 20, 30 and 40 meters -- no traps. Resonators are placed in parallel not in series. End loading of the lower HF bands allows efficient operation with a manageable antenna height.

AV-620, \$269.95. (6,10,12,15,17,20 Meters). 22.5 ft., 10.5 lbs. The AV-620 covers all bands 6 through 20

Meters with no traps, no coils, no radials yielding an uncompromised signal across all bands.

Free Hy-Gain Catalog
and Nearest Dealer . . . 800-973-6572
Call your dealer for your best price!

hy-gain®

Antennas, Rotators & Towers
308 Industrial Park Road, Starkville, MS 39759 USA
Toll-free Customer Sales Hotline: 800-973-6572
• TECH: 662-323-9538 • FAX: 662-323-6551
<http://www.hy-gain.com>

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Quality You Can Trust! Made in USA

HIGH QUALITY TUNERS

- unbalanced tuners up to 1500 watt PEP
- balanced tuners up to 1500 watt PEP
- dual function unbalanced/balanced output tuners
- added stability with heavy gauge aluminium construction
- classic Vernier dial plates for more accurate settings
- designed and made in the USA



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*"...one of the best tuners
I've owned in 43 years..."
- Stan*

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Piqua, OH 45356
937-773-6255

W7FG True Ladder Line

402731 West 2155 Drive, Bartlesville, OK 74006

www.w7fg.com • w7fg@w7fg.com

Order Line: 800-807-6146

True Ladder Line

- Nominal Impedance – 600 Ohms
- Spreaders – Light weight, low wind loading, long life
- Wire – 16 Gauge, 26 Strands, 100% Copper

50 Feet (Minimum Order) \$23*
100 Feet \$40*
Over 200 Feet Call or E-Mail



Wire Antennas with Ladder Line

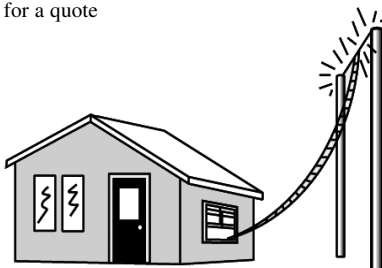
- Wire – 16 Gauge, 26 Strands, 100% Copper
- One conductor from equipment to far end antenna insulators
- No splices, no solder, no terminal lugs
- Center and end insulators are same material as Ladder Line spreaders
- We will build to your specifications. Call or e-mail for a quote

160 - 10 Meter Doublet (Dipole) (240 Feet)
with 50 Feet of Feed Line.....\$57*
with 100 Feet of Feed Line.....\$74*

80 - 10 Meter Doublet (Dipole) (125 Feet)
with 50 Feet of Feed Line.....\$43*
with 100 Feet of Feed Line.....\$60*

40 - 10 Meter Doublet (Dipole) (65 Feet)
with 50 Feet of Feed Line.....\$35*
with 100 Feet of Feed Line.....\$52*

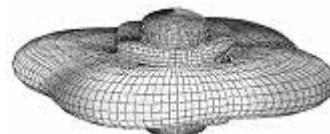
G5RV 80 - 10 Meters (102 Feet)
With 31 Feet of Ladder Line.....\$35*
(Requires coax from supplied UHF male connector to equipment.)



Please note that all of our antenna products are assembled by members of Help Works, Inc, of Pawhuska, OK. They are an agency that employs adults with developmental disabilities.

* Prices shown are valid at date of publication. Please visit our site or call for verification.

A picture is worth a thousand words...



With the all-new

ANTENNA MODEL™

wire antenna analysis program for Windows you get true 3D far field patterns that are far more informative than conventional 2D patterns or wire-frame pseudo-3D patterns.

Describe the antenna to the program in an easy-to-use spreadsheet-style format, and then with one mouse-click the program shows you the antenna pattern, front/back ratio, front/rear ratio, input impedance, efficiency, SWR, and more.

An optional **Symbols** window with formula evaluation capability can do your computations for you. A **Match Wizard** designs Gamma, T, or Hairpin matches for Yagi antennas. A **Clamp Wizard** calculates the equivalent diameter of Yagi element clamps. A **Yagi Optimizer** finds Yagi dimensions that satisfy performance objectives you specify. Major antenna properties can be graphed as a function of frequency.

There is **no built-in segment limit**. Your models can be as large and complicated as your system permits.

ANTENNA MODEL is only \$85US. This includes a Web site download and a permanent backup copy on CD-ROM. Visit our Web site for more information about **ANTENNA MODEL**.

Teri Software
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Need a Match?

Performance engineering and over 30 years of experience is a great match! At SGC, we build next generation HF radios, antennas, couplers, and amplifiers. Our focus is on exceptional performance in competitively priced, rugged, easy to use equipment. Match your needs with SGC!

Smartuners™

Starting with the popular SG-230, our entire family of Smartuners is capable of matching virtually any antenna to any radio. With fast automatic tuning, built-in memory, and 1.8 to 60 Mhz frequency coverage, Smartuners set the standard.



STEALTH Kit

Be stealthy, be portable, or just be ready for any emergency. The SGC STEALTH Kit combines a frequency agile SG-237 Smarttuner with wire and accessories to erect a variety of antennas capable of operating from 1.8 to 60 Mhz. When you absolutely must be on the air, the STEALTH kit makes it possible.



QMS

Making your Smarttuner mobile is simple with the SGC Quick Mount System. QMS systems put the Smarttuner outside the vehicle, away from ignition noise and directly at the base of the antenna system for optimum operation. Overall efficiency is improved and there are no holes in your vehicle body. Installation is simple and fool proof, requiring only a few minutes.



Antennas

SGC designs wide band antennas for portable, mobile, marine or fixed installations. Our antennas are perfectly matched to the flexibility and frequency agility of our Smarttuner line of antenna couplers. Changing bands, changing channels, or just changing conditions are not a problem!

MAC-200

Select and tune 5 antennas automatically from the Master Antenna Controller. The MAC-200 provides a single point of control with built-in intelligence that knows what antenna you like to use in each frequency band. It automatically selects and tunes the appropriate antenna while providing power and VSWR for your use.



No Compromise Performance!



Your HF Solution!

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SAVE BIG ON ANTENNAS, TOWERS & CABLE

TELESCOPING ALUMINUM TUBING

DRAWN 6063-T832	1.250" ... \$1.55/ft
.375"	1.375" ... \$1.75/ft
.500"	1.500" ... \$1.95/ft
.625"	1.625" ... \$2.25/ft
.750"	1.750" ... \$2.50/ft
.875"	1.875" ... \$2.75/ft
1.000" ...	2.000" ... \$3.00/ft
1.125" ...	2.125" ... \$3.50/ft

In 6' or 12' lengths, 6' lengths ship UPS. Call for 3/16" & 1/4" rod, bar stock, and extruded tubing.

BENCHER / BUTTERNUT

Skyhawk, Triband Beam	\$1129
HF2V, 2 Band Vertical	\$249
HF5B, 5 Band Minibeam	\$359
HF6VX, 6 Band Vertical	\$339
HF9VX, 9 Band Vertical	\$369
A1712, 12/17m Kit	\$54
CPK, Counterpoise Kit	\$129
RMKII, Roof Mount Kit	\$159
STRIL, Roof Radial Kit	\$125
TBR160S, 160m Kit	\$139

More Bencher/Butternut-call

COMET ANTENNAS

GP15, 6m/2m/70cm Vertical ...	\$149
GP6, 2m/70cm Vertical	\$139
GP9, 2m/70cm Vertical	\$179
B10NMO, 2m/70cm Mobile	\$36
SB14, 6m/2m/70cm Mobile	\$59
SBB224NMO, 2m/220/70cm	\$69
SBB2NMO, 2m/70cm Mobile	\$39
SBB5NMO, 2m/70cm Mobile	\$55
SBB7NMO, 2m/70cm Mobile	\$75
UHV4/UHV6	\$109/135

Much more Comet in stock-call

DIAMOND ANTENNAS

D130J/DPGH62	\$79/139
F22A/F23A	\$89/119
NR72BNMO/NR73BNMO	\$39/54
NR770HBNMO/NR770RA	\$55/49
X200A, 2m/70cm Vertical	\$129
X500HNA/X700HNA	\$229/369
X510MA/510NA	\$189/189
X50A/V2000A	\$99/149
CR627B/SG2000HD	\$99/79
SG7500NMO/SG7900A	\$75/112

More Diamond antennas in stock

GAP ANTENNAS

Challenger DX	\$289
Challenger Counterpoise	\$29
Challenger Guy Kit	\$19
Eagle DX	\$299
Eagle Guy Kit	\$29
Titan DX	\$329
Titan Guy Kit	\$29
Voyager DX	\$409
Voyager Counterpoise	\$49
Voyager Guy Kit	\$45

Please Call for Delivery Information

CUSHCRAFT ANTENNAS

13B2/A148-10S	\$149/85
A270-6S/A270-10S	\$79/99
A3S/A4S	\$449/539
A50-3S/5S/6S	\$95/169/249
A6270-13S	\$189
AR2/ARX2B	\$49/69
AR270/AR270B	\$85/99
R6000/R8	\$319/449
X7/X740	\$679/289
XM240	\$719

Please call for more Cushcraft items

M2 VHF/UHF ANTENNAS

144-148 MHz

2M4/2M7/2M9	\$95/109/129
2M12/2M5WL	\$165/209
2M5-440XP, 2m/70cm	\$179

420-450 MHz

440-470-5W/420-450-11 ...	\$139/95
432-9WL/432-13WLA	\$179/239
440-18/440-21ATV	\$129/149

Satellite Antennas

2MCP14/2MCP22	\$169/239
436CP30/436CP42UG	\$239/279

M2 ANTENNAS

50-54 MHz

6M5X/6M7JHV	\$209/269
6M2WLC/6M9KHW	\$459/499

10/12/15/17/20m HF

10M4DX, 4 Element 10m	\$399
12M4DX, 4 Element 12m	\$399
15M4DX, 4 Element 15m	\$449
17M3DX, 3 Element 17m	\$399
20M4DX, 4 Element 20m	\$529

More M2 models in stock-please call

MFJ

259B	\$219
269	\$299
941E	\$109
945E	\$99
949E	\$139
969	\$169
986	\$289
989C	\$309
1798, 80-2m Vertical	\$249
1796, 40/20/15/10/6/2m Vert. ...	\$189

Big MFJ inventory-please call

LAKEVIEW HAMSTICKS

9106.....6m	9115.....15m	9130.....30m
9110.....10m	9117.....17m	9140.....40m
9112.....12m	9120.....20m	9175.....75m

All handle 600W, 7' approximate length, 2:1 typical VSWR... \$24.95

HUSTLER ANTENNAS

4BTV/5BTV/6BTV	\$129/169/199
G6-270R, 2m/70cm Vertical ...	\$169
G6-144B/G7-144B	\$109/179

Hustler Resonators in stock-call

FORCE 12-MULTIBAND

C3 10/12/15/17/20m, 7 el	\$599
C3E 10/12/15/17/20m, 8 el	\$649
C3S 10/12/15/17/20m, 6 el	\$539
C3SS 10/12/15/17/20m, 6 el	\$559
C4 10/12/15/17/20/40m, 8 el ..	\$759
C4S 10/12/15/17/20/40m, 7 el ..	\$679
C4SXL 10/12/15/17/20/40m, 8 el ..	\$979
C4XL 10/12/15/17/20/40m, 9 el ..	\$1119
C19XR 10/15/20m, 11 el	\$959
C31XR 10/15/20m, 14 el	\$1299

Please call for more Force 12 items

ROHN TOWER

25G/45G/55G	\$89/189/239
25AG2/3/4	\$109/109/119
45AG2/4	\$209/225
AS25G/AS455G	\$39/89
BPC25G/45G/55G	\$75/99/110
BPL25G/45G/55G	\$85/109/125
GA25GD/45/55	\$68/89/115
GAR30/GAS604	\$35/24
SB25G/45/55	\$39/89/109
TB3/TB4	\$85/99

Please call for more Rohn prices

GLEN MARTIN ENGINEERING

Hazer Elevators for 25G

H2, Aluminum Hazer, 12 sq ft.	\$359
H3, Aluminum Hazer, 8 sq ft.	\$269
H4, HD Steel Hazer, 16 sq ft.	\$339

Aluminum Roof Towers

RT424, 4 Foot, 6 sq ft	\$159
RT832, 8 Foot, 8 sq ft	\$239
RT936, 9 Foot, 18 sq ft	\$389
RT1832, 17 Foot, 12 sq ft	\$519
RT2632, 26 Foot, 9 sq ft	\$869

COAX CABLE

RG-213/U, (#8267 Equiv.) ...	\$36/ft
RG-8X, Mini RG-8 Foam	\$19/ft
RG-213/U Jumpers	Please Call
RG-8X Jumpers	Please Call

Please call for more coax/connectors

TIMES MICROWAVE LMR® COAX

LMR-400	\$59/ft
LMR-400 Ultraflex	\$89/ft
LMR-600	\$1.19/ft
LMR600 Ultraflex	\$1.95/ft

ANTENNA ROTATORS

M2 OR-2800P	\$1249
Yaesu G-450A	\$249
Yaesu G-800SA/DXA	\$329/409
Yaesu G-1000DXA	\$499
Yaesu G-2800SDX	\$1089
Yaesu G-550/G-5500	\$299/599

ROTATOR CABLE

R62 (#18)	\$32/ft.
R81/82	\$25/ft./39/ft.
R84	\$85/ft

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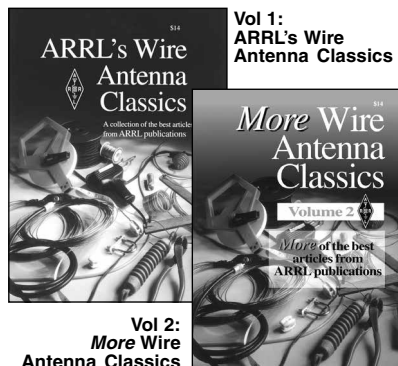
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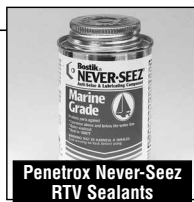
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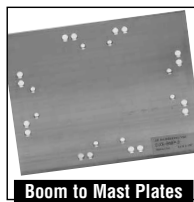
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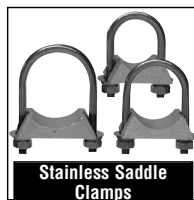
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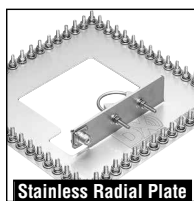
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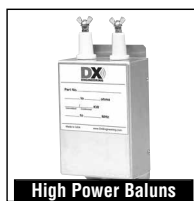
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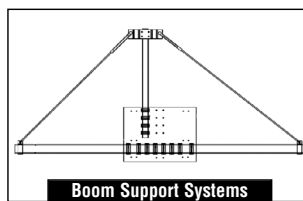
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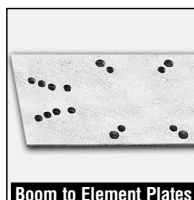
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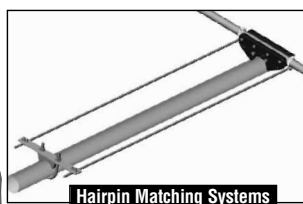
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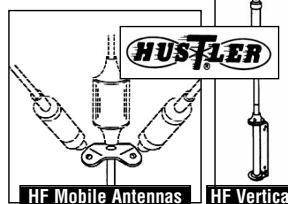
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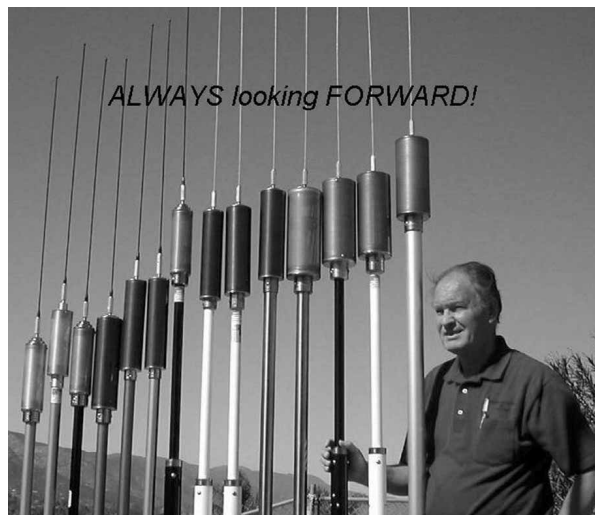
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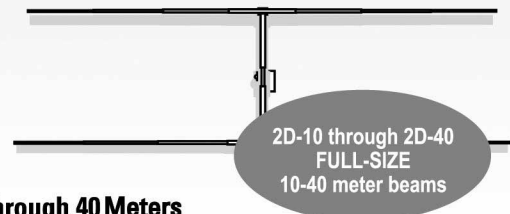
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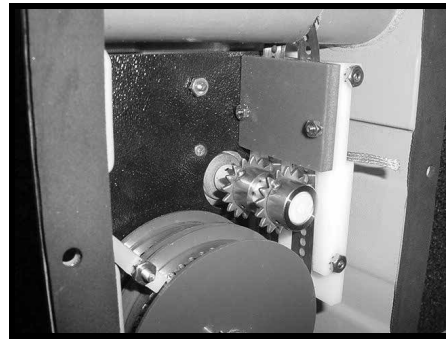
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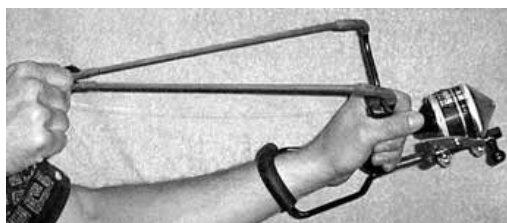
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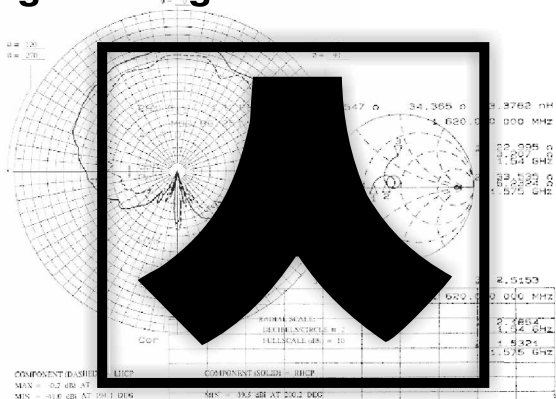
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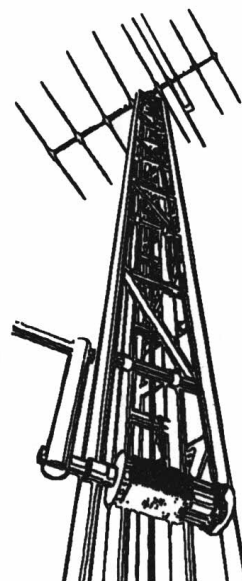
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D-42	10/15/20/40	2	55'	\$89.95
D-52	10/15/20/40/80	2	105'	\$94.95
D-56	10/15/20/40/80	6	82'	\$149.95
D-68	10/15/20/40/80/160	8	146'	\$194.95

TRAP VERTICALS / "SLOPERS"

VS-42	10/15/20/40	2	24'	\$79.95
VS-53	10/15/20/40/80	3	42'	\$94.95
VS-64	10/15/20/40/80/160	4	73'	\$119.95

* Can be used without radials *End fed

* Feedline can be buried if desired *Permanent or portable use

ALL TRAP ANTENNAS are ready to use

• Coax fed • Factory assembled
• Commercial quality • Handles 600 Watts • Comes complete with Deluxe Traps, Deluxe Center Connector, 14 gauge stranded antenna wire and end insulators • Automatic band switching • Tuner usually never required • For all transmitters, receivers and transceivers • For all class Amateurs • One feedline works all bands • Instructions included.

SINGLE BAND DIPOLES

Model	Band	Length	Kit Form Price	Assembled
D-10	10	16'	\$25.95	\$29.95
D-15	15	22'	\$26.95	\$30.95
D-20	20	33'	\$27.95	\$31.95
D-40	40	66'	\$31.95	\$35.95
D-80	80/75	130'	\$37.95	\$41.95
D-160	160	260'	\$50.95	\$54.95

Includes instructions • Deluxe Center Connector

• 14 gauge stranded antenna wire and end insulators
• Coax fed

LIMITED SPACE DIPOLES

• Reduces overall length over 40% • Coax fed
• "Shorteners" are enclosed, sealed, weatherproof and lightweight • Complete with Deluxe Center Connector, 14 gauge stranded antenna wire, end insulators, assembly instructions • Use as inverted V, or flat-top
• Excellent for all class Amateurs

Model	Band	Length	Price
LS-40K	40	38'	\$58.95
LS-80K	80/75	69'	\$66.95
LS-160K	160	100'	\$68.95

Any single band or Trap antenna with PB-1 Balun instead of Deluxe Center Connector—add \$12.00 to antenna price. (For PB-1-C—add \$14.00)

PRO-BALUN PB-1 \$24.95

• 1:1 for dipoles, beams and slopers
• Handles full legal power
• Broadband 3 to 35 MHz
• Lightweight, sealed and waterproof
• Deluxe Connectors require NO soldering
• NO jumper wires
• Minimize coax and harmonic radiation
• Accepts standard PL-259 connector 2" x 6.5"



PRO-BALUN PB-1-C \$25.95

Current-type 1:1 ratio • 3kW—1.5 to 55 MHz

PRO-BALUN PB-4 4:1 Ratio \$25.95



ALL BAND—LIMITED SPACE ANTENNA

• Works ALL bands, 160-10 Meters • Sealed, weatherproof, lightweight shorteners utilize NO-rust terminals • Perfect match for your antenna tuner with balanced line output • Handles full power • Works with all transmitters, transceivers, receivers, etc • Completely factory assembled, ready to install—NO adjustments necessary • Only 70 feet overall length • Perfect for ALL classes of Amateurs • Install as flat-top, sloper, inverted V, or almost any configuration • Shorteners provide full 135 feet electrical length with only 70 feet physical length • Utilizes heavy 14 gauge stranded wire • INCLUDES 100 feet of 450-Ω feedline

MODEL AS-2 • \$64.95

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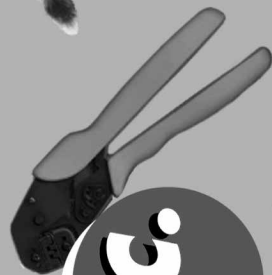
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CXP1318FN



CXP213C



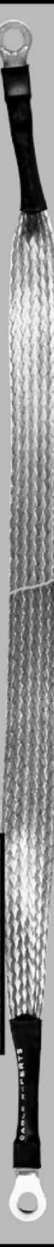
CXP008C



CXP08XC



**BRAIDED
GROUND STRAP**



CXP1318FC

Connector: PL259 both ends.
Burial: Yes. UV Resistant: Yes.
Shields: 2 (100% bonded foil + 95%TC Braid) V/P 84%
Attenuation @ 100ft: 50MHz 0.9, 150MHz 1.6, 450MHz 2.8
Recommended frequencies: 50-450MHz.

CXP1318FN

Connector: "N" Male both ends.
Burial: Yes. UV Resistant: Yes.
Shields: 2 (100% bonded foil + 95%TC Braid) V/P 84%
Attenuation @ 100ft: 150MHz 1.6, 450MHz 2.8, 1500MHz 5.1
Recommended frequencies: 150MHz & higher.

CXP213C

Connector: PL259 both ends.
Burial: Yes. UV Resistant: Yes.
Shields: 1 (97%BC Braid) V/P 66%
Attenuation @ 100ft: 10MHz 0.62, 30MHz 1.2
Recommended frequencies: 1-30MHz (High Power).

CXP008C

Connector: PL259 both ends.
Burial: No. UV Resistant: Yes.
Shields: 1 (95%BC Braid) V/P 78%
Attenuation @ 100ft: 10MHz 0.51, 30MHz 0.9, 50MHz 1.2
Recommended frequencies: 1-50MHz.

CXP08XC

Connector: PL259 both ends.
Burial: No. UV Resistant: Yes.
Shields: 1 (95%BC Braid) V/P 78%
Attenuation @ 100ft: 10MHz 0.98, 30MHz 2.0
Recommended frequencies: 1-30MHz.

BRAIDED GROUND STRAP

Sizes: 1/2" or 1" wide.
Lengths: 1ft., 3ft., 5ft. or 10ft.
Ring terminals both ends.
#8 (1/2" wide), #6 (1" wide).

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- Enhanced RX performance
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- Advanced CW functions
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- 101 alphanumeric memories
- Transverter I/O port
- Live band scope
- Digital & analog meter
- Dual receive
- Digital voice recorder



PS-125 DC Power Supply

- 25 amps continuous
- 13.8 V DC
- Quieter RF operation

Smaller footprint - takes up less space,
matches newer Icom rigs.



IC-746PRO All Mode Transceiver

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- Digital twin passband tuning
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- SWR analyzer
- Sweeping scope



IC-PW1 1kW Linear Amplifier

- Remote control head
- 100% duty cycle
- Auto antenna tuner

Can be used with ANY brand of HF,
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10M restorable with FCC license.



IC-718 HF Transceiver

- 160-10M* @ 100W
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- Band stacking register
- CW keyer built-in
- One touch band switching
- Direct frequency input
- VOX built-in
- IF shift
- Preamp & attenuator
- Mic compressor
- Digital S/Rf meter
- 101 memories
- Adjustable noise blanker
- Auto tuning steps
- Optional DSP



SP-20 External Speaker

Equipped with four selectable
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SM-20 Desktop Mic

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- 160-10M/6M/2M/70CM*
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- 107 alphanumeric memories
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- AM, FM, WFM, SSB, CW, RTTY w/DSP
- Auto repeater
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- Backlit function keys
- Built-in keyer
- IF shift
- Tone squelch
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- 10W~0.1W @ 13.5V SSB, CW, RTTY, FM
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- Newly designed PA unit
- Internal antenna tuner
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- Automatic battery save mode
- Automatic power scale meter
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- High sensitivity



IC-706MKIIG not included

AT-180 Automatic Antenna Tuner

HF/6M fully automatic tuner with 70 channel preset memories and "automatic tuner on" function when connected to the IC-706MKIIG.

Great for base as well as mobile installations! Tune your vertical beam or coax fed antenna from 160 Meters to 6 Meters*. A compact matching package for the IC-706MKIIG.



AH-4 Automatic Antenna Tuner

Specially designed to tune a long wire antenna for portable or mobile operation. Match a 7m + (23'+) long wire all HF bands 3.5 MHz and higher.

This tuner loves the great outdoors! Whether under your vehicle, or in a tree connected to a long wire, it's the perfect match for your IC-706MKIIG. It's compact, with watertight construction.



LC-156 '703 Multi Bag

Designed by hams, for hams! Icom's MultiBag '703 carrier offers plenty of room to store and protect your gear while operating outdoors. Includes a rain cover and controlhead case that attaches to your belt.



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