

PAARA radios

There will be a silent auction at the December meeting to auction off this equipment. Radio packages will be sold as a package and not the individual parts. Most don't have microphones which limited testing to receive only. They were all working when collected from SK's shacks but are being sold as is. The minimum bid is ~ ¼ of the current internet prices shown. All include manuals.

Kenwood TS-820S Package:

TS-820S Transceiver - missing switch bat handle, powers up, no mic — Ebay w/MC-50 \$260

Kenwood SP-230 speaker— unknown functionality — Ebay \$69

Kenwood AT-230 antenna tuner— unknown functionality — Ebay \$100 ~ \$325

Kenwood VFO-240— unknown functionality but likely works, for use with the TS-530S or TS-830S— Ebay \$50 — **Total \$480 minimum bid \$120**



TS-820S SPECIFICATION

FREQUENCY RANGE 160 meter band — 1.80 to 2.00 MHz
 80 meter band — 3.50 to 4.00 MHz
 40 meter band — 7.00 to 7.30 MHz
 20 meter band — 14.00 to 14.35 MHz
 15 meter band — 21.00 to 21.45 MHz
 10 meter band — 28.00 to 28.50 MHz (A)
 10 meter band — 28.50 to 29.00 MHz (B)
 10 meter band — 29.00 to 29.50 MHz (C)
 10 meter band — 29.50 to 29.70 MHz (D)
 WWV — 15.0 MHz (receive only)

MODE USB, LSB, or CW, FSK

POWER REQUIREMENTS

	120/220 VAC, 50/60 Hz		13.8V DC operation	
	TS-820S	TS-820	TS-820S	TS-820
Receive	57 watts (heaters on) 38 watts (heaters off)	45 watts (heaters on) 26 watts (heaters off)	6A (heaters on) 1.4A (heaters off)	5A (heaters on) 0.6A (heaters off)
Transmit	292 watts (maximum)	280 watts (maximum)	16A (Maximum)	15A (maximum)

PLATE POWER INPUT

	120/220 VAC, 50/60 Hz operation	13.8V DC operation
	200 watts PEP for SSB operation 160 watts DC for CW operation 100 watts for FSK operation	120 watts PEP for SSB operation 90 watts DC for CW operation 60 watts for FSK operation

AUDIO INPUT IMPEDANCE 50 k ohms (high impedance)
AUDIO OUTPUT IMPEDANCE 4 to 16 ohms (speaker or headphones)
AUDIO OUTPUT More than 1.5 watts (with less than 10% distortion) into an 8 ohm load.
RF OUTPUT IMPEDANCE 50 ~ 75 ohms
FREQUENCY STABILITY Within 100 Hz during any 30 minute period after warmup
 Within ± 1 kHz during the first hour after 1 minute of warmup
AUDIO FREQUENCY RESPONSE 400 to 2600 Hz, within -6 db
CARRIER SUPPRESSION Carrier better than 40 db down from the output signal
SIDEBAND SUPPRESSION Unwanted sideband is better than 50 db down from the output signal
IMAGE RATIO Image frequency better than 60 db down from the output signal
HARMONIC RADIATION Better than 40 db down from output signal
SPURIOUS RADIATION Better than 60 db down from output signal (without harmonic radiation)
IF REJECTION IF frequency is 80 db or more down from output signal
RECEIVER SENSITIVITY 0.25 μ V S+N/N 10 db or more
RECEIVER SELECTIVITY SSB: 2.4 kHz bandwidth (-6 db down)
 4.4 kHz bandwidth (-60 db down)
 CW*: 0.5 kHz bandwidth (-6 db down)
 1.8 kHz bandwidth (-60 db down)
 * (with optional CW filter installed)

TUBE AND SEMICONDUCTOR COMPLEMENT

	TS-820S	TS-820
Tubes	3	3
IC'S	38	5
FET'S	31	30
Transistors	95	74
Diodes	195	167

DIMENSIONS 13.2" wide \times 5.9" high \times 13.2" deep
WEIGHT 37.4 lbs.



1. Antenna Coupler

Frequency range: 9 amateur bands from 1.8 to 29.7 MHz.

Input impedance: 50 Ω

Output impedance: 10 to 500 Ω , unbalanced.

Through power: 200 W at max.

Insertion loss: Less than 0.5 dB at optimum match

PROVISO: 1.8 MHz only

Output impedance: 20 to 500 Ω , unbalanced

Through power: 100 W at max.

2. Wattmeter

Type: Through-line wattmeter.

Frequency range: 1.8 to 30 MHz.

Measurable RF power: Up to 20/200 W, switched.

Measurement mode: Forward or reflected power switched.

Impedance: 50 Ω

Accuracy: Better than $\pm 10\%$ of full scale.

3. SWR Meter

SWR detection: Toroidal core direction coupler.

Measurable range: 1.1 to 10.

Min. power required: 4 W.

4. General

Connectors, INPUT: UHF type, 50 Ω

Connectors, ANT-1: UHF type.

ANT-2: UHF type.

ANT-3: Wire antenna only.

GND: Stud for grounding

Dimensions: H 133 mm (5-1/4")
W 180 mm (7-1/16")
D 287 mm (11-5/16")

Net weight: 3.4 kg (7.5 lbs) approx.

Note: Circuit and ratings are subject to change without notice due to developments in technology.



■ SPECIFICATIONS

Oscillator frequency	5.50~6.00 MHz
Oscillator circuit.....	Clapp
Output voltage	0.2V (across 470 ohm load)
Frequency stability	Within 100 Hz per 30 minutes after 3 minutes warm-up (at room temperature)
Solid-state complement	FET: 2 Transistor: 2 Diode: 6
Power source.....	From TS-530S or TS-830S
Dimensions	180 (7-1/8") W × 133 (5-1/4") H × 288 (11-5/16") D mm (inch)
Weight	2.9 kg (6.4 lbs)

* Specifications are subject to change for improvement without notice.

Kenwood TS450S Package

TS450S transceiver —Ebay \$300, Kenwood PS-30 Power supply — Ebay \$135 & Kenwood SP-180 Speaker – Ebay \$69 — works, no mic — **Total \$504 minimum bid \$125**



2. SPECIFICATIONS AND ACCESSORIES

2-1. SPECIFICATIONS

TS-450S

			Specifications				
General	Mode		J3E(LSB, USB), A1A(CW), A3E(AM), F3E(FM), F1A(FSK)				
	Memory Channels		100				
	Antenna impedance		50 ohms With AT-450 Antenna Tuner 20~150 ohms				
	Power requirement		12 to 16 VDC (13.8 VDC reference)				
	Grounding		Negative				
	Current drain	Receive mode with no input signal		2A			
		Transmit mode		20.5A			
	Operating temperature		-10°C to +50°C (+14°F to +122°F)				
	Frequency stability		Less than ±10 PPM				
	Frequency accuracy		Less than ±10 PPM				
Dimensions [W×H×D] (Projections included)		270×96×305mm(10-5/8"×3-25/32"×12-1/64") (280×107×340mm)(11-1/32"×4-1/4"×13-25/64")					
Weight	With AT unit		7.5kg (16.5lbs)				
	Without AT unit		6.3kg (13.9lbs)				
Transmitter	Frequency range		160m band	1.8	to	2.0	MHz
			80m band	3.5	to	4.0	MHz
			40m band	7.0	to	7.3	MHz
			30m band	10.1	to	10.15	MHz
			20m band	14.0	to	14.35	MHz
			17m band	18.068	to	18.168	MHz
			15m band	21.0	to	21.45	MHz
			12m band	24.89	to	24.99	MHz
	10m band	28.0	to	29.7	MHz		
	Output power (Without AT)	1.9~ 28MHz	SSB, CW, FSK, FM	MAX	100W		
				MIN	Less than 20W		
			AM	MAX	40W		
MIN				Less than 10W			
Modulation	SSB		Balanced modulation				
	FM		Reactance modulation				
	AM		Low level modulation				
Spurious radiation		Less than -50dB					
Carrier suppression (with 1.5kHz reference)		More than 40dB					

			Specifications	
Transmitter	Unwanted sideband suppression (with 1.5kHz reference)		More than 40dB	
	Maximum frequency deviation (FM)		Less than ± 5 kHz	
	Frequency response (-6 dB)		400 to 2600Hz	
	XIT variable range	10 Hz step	More than ± 1.1 kHz	
		20 Hz step	More than ± 2.2 kHz	
Microphone impedance		600 Ω		
Receiver	Circuitry		Triple conversion superheterodyne	
	Frequency range		500kHz to 30MHz	
	Intermediate frequency		1st : 73.05MHz, 2nd : 8.83MHz, 3rd : 455kHz	
	Sensitivity	SSB, CW, FSK (at 10dB (S+N)/N)	500kHz~1.62MHz*	Less than 4 μ V
			*1.62MHz ~21.5MHz	Less than 0.2 μ V
			21.5MHz~30MHz	Less than 0.13 μ V
		AM (at 10dB (S+N)/N)	500kHz~1.62MHz*	Less than 32 μ V
			*1.62MHz ~21.5MHz	Less than 2 μ V
			21.5MHz~30MHz	Less than 1.3 μ V
	FM (at 12dB SINAD)	28MHz~30MHz	Less than 0.25 μ V	
	Selectivity	SSB, CW, FSK		-6 dB:More than 2.2kHz, -60 dB:Less than 4.4kHz
		AM		-6 dB:More than 5kHz, -50 dB:Less than 18kHz
		FM		-6 dB:More than 12kHz, -50 dB:Less than 25kHz
	Image ratio		More than 70dB	
	1st IF rejection		More than 70dB	
	Notch filter attenuation		More than 20dB	
	RIT variable range	10 Hz step	More than ± 1.1 kHz	
20 Hz step		More than ± 2.2 kHz		
Squelch sensitivity	SSB, CW, FSK, AM	500kHz~1.62MHz*	Less than 20 μ V	
		*1.62MHz~30MHz	Less than 2 μ V	
	FM	28MHz~30MHz	Less than 0.25 μ V	
Output		1.5W across 8 ohms load (10% distortion)		
Output load impedance		8 ohms		

Notes

1. Circuit and ratings are subject to change without notice due to advancements in technology.
2. Remember to keep the transmit output power within the power limitations of your license.
3. * : The U.S.A. version is 1.705 MHz.

**iCOM IC-761 transceiver – works, no mic — Ebay \$280 ~ \$600
minimum bid \$75**



■ GENERAL

● Frequency coverage	: Receive 0.1MHz ~ 30.0MHz Transmit 160m band 1.8MHz ~ 2.0MHz 80m band 3.45MHz ~ 4.1MHz 40m band 6.95MHz ~ 7.5MHz 30m band 9.95MHz ~ 10.5MHz 20m band 13.95MHz ~ 14.5MHz 17m band 17.95MHz ~ 18.5MHz 15m band 20.95MHz ~ 21.5MHz 12m band 24.45MHz ~ 25.1MHz 10m band 27.95MHz ~ 30.0MHz
● Modes	: SSB (A3J), CW (A1), FM (F3), RTTY (F1), AM (A3)
● Frequency control	: CPU-based 10Hz step digital PLL synthesizer
● Frequency stability	: $\pm 100\text{Hz}$ in the range of $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$ ($+14^{\circ}\text{F} \sim +140^{\circ}\text{F}$)
● Antenna impedance	: 50Ω (when TUNER SWITCH is OFF) $16.7 \sim 150\Omega$ (with TUNER SWITCH ON)
● Power supply requirement	: U.S.A. version AC 100 ~ 120V Australia, Europe, France versions AC 200 ~ 240V
● Power consumption	: Max. 650VA transmitting Max. 80VA receiving
● Dimensions	: 424mm(W) x 150mm(H) x 390mm(D) (Projections not included)
● Weight	: 17.5kg

■ TRANSMITTER

● Output power	: SSB Max. 100W PEP CW, RTTY, FM Max. 100W AM Max. 40W
● Modulation	: SSB Balanced modulation FM Reactance modulation AM Low level modulation
● Max. frequency deviation	: $\pm 5\text{kHz}$
● RTTY shift width	: 170Hz, 850Hz
● Spurious emissions	: Less than -60dB
● Carrier suppression	: Less than -40dB
● Unwanted sideband	: Less than -55dB with 1000Hz modulation
● Microphone impedance	: 600Ω

RECEIVER

●Receive system	: SSB, CW, RTTY, AM FM	Quadruple-conversion Triple-conversion
●Intermediate frequencies	: 1st All modes 70.4515MHz 2nd SSB 9.0115MHz CW, RTTY 9.0106MHz FM, AM 9.0100MHz 3rd All modes 455kHz 4th SSB 9.0115MHz CW, RTTY 9.0106MHz AM 9.0100MHz	
●Sensitivity (PREAMP SWITCH ON)	: SSB, CW, RTTY 0.1 ~ 0.5MHz Less than 0.5 μ V for 10dB S/N 0.5 ~ 1.6MHz Less than 1 μ V for 10dB S/N 1.6 ~ 30MHz Less than 0.15 μ V for 10dB S/N AM (NARROW FILTER selected) 0.1 ~ 0.5MHz Less than 3 μ V for 10dB S/N 0.5 ~ 1.6MHz Less than 6 μ V for 10dB S/N 1.6 ~ 30MHz Less than 1 μ V for 10dB S/N FM 28 ~ 30MHz Less than 0.3 μ V for 12dB SINAD	
●Squelch sensitivity	: Less than 0.3 μ V	
●Selectivity	: SSB (FILTER SWITCH ON) 2.4kHz/−6dB 3.8kHz/−60dB CW, RTTY (FILTER SWITCH ON) 500Hz/−6dB 1kHz/−60dB AM 6kHz/−6dB 18kHz/−50dB FM 15kHz/−6dB 30kHz/−50dB	
●Audio output power	: More than 2.6W at 10% distortion with 8 Ω load	
●Notch filter attenuation	: More than 45dB	
●RIT variable range	: \pm 9.9kHz	

ANTENNA TUNER

●Output matching range	: 16.7 ~ 150 Ω unbalanced (when TUNER SWITCH is ON).
●Minimum input power	: 8W
●Band switching time	: 3 seconds or less
●Auto tuning time	: 3 seconds or less
●Auto tuning accuracy	: VSWR 1.2:1 or less
●Insertion loss	: 0.5dB or less (after tuning)

* All stated specifications are subject to change without notice or obligation.

Yaesu FT-990 transceiver – works, no mic — **Ebay \$350 ~ \$750**
minimum bid \$90



Specifications

General

Receiving frequency range: 100 kHz — 30 MHz

Transmitting frequency ranges:

- 160-m band, 1.8 to 2.0 MHz (or 1.81/1.83 to 1.85)
- 80-m band, 3.5 to 4.0 MHz
- 40-m band, 7.0 to 7.5 MHz
- 30-m band, 10.0 to 10.5 MHz
- 20-m band, 14.0 to 14.5 MHz
- 17-m band, 18.0 to 18.5 MHz
- 15-m band, 21.0 to 21.5 MHz
- 12-m band, 24.5 to 25.0 MHz
- 10-m band, 28.0 to 29.7 MHz

Frequency stability: < 10 ppm from -10 to +50 °C

(except FM, < 200 Hz),

< 0.5 ppm from -10 to +50 °C w/TCXO-2 option
(FM < 150 Hz)

Emission modes: LSB/USB (J3E), CW (A1A),
FSK (J1D, J2D), AM (A3E), FM (F3E)

Basic frequency steps:

- 10 Hz for J3E, A1A and J1D;
- 100 Hz for A3E, F3E and J2D

Antenna impedance: 16.5 to 150Ω (50Ω nominal)

Supply voltage:

100 – 117 or 200 – 234 VAC ± 10%, 50/60 Hz

Power consumption (approx.):

60 VA receive, 470 VA for 100 watts transmit

Dimensions (WHD): 368 × 129 × 370 mm

Weight (approx.): 13 kg. (28.6 lbs)

Transmitter

Power output:

adjustable up to 100 watts (25 watts AM carrier)

Duty cycle: 100% @ 100 watts,

50% @ 100 watts (FM & RTTY, 3-minute tx)

Modulation types

- SSB: Balanced, filtered carrier
- AM: Low-level (early stage)
- FM: Variable reactance
- FSK: Audio frequency shift keying

Maximum FM deviation: ± 2.5 kHz

FSK shift frequencies: 170, 425 and 850 Hz

Packet shift frequencies: 200, 1000 Hz

Harmonic radiation: at least 50 dB below peak output

SSB carrier suppression:

at least 40 dB below peak output

Undesired sideband suppression:

at least 50 dB below peak output

Audio response (SSB):

not more than -6 dB from 400 to 2600 Hz

3rd-order IMD: -36 dB typical @ 100 watts PEP on
14.2 MHz

Microphone impedance: 500 to 600 Ω

Receiver

Circuit type:

triple-conversion superheterodyne

Intermediate frequencies:

47.21 and 10.94 MHz, and 455 kHz

Sensitivity:

(for 10 dB S/N, 0 dBμ = 1 μV)

Frequency ⇒ Mode (BW) ↓	100 – 250 kHz	250 – 500 kHz	0.5 – 1.8 MHz	1.8 – 30 MHz
SSB, CW (2.4 kHz)	< 4 μV	< 1 μV	< 2 μV	< 0.25 μV
AM (6 kHz)	< 10 μV	< 2 μV	< 4 μV	< 1 μV
29-MHz FM (for 12 dB SINAD)	—	—	—	< 0.5 μV

Selectivity (-6/-60 dB):

Button	Modes	Minimum -6 dB BW	Maximum -60 dB BW
2.4 kHz	all except FM	2.2 kHz	4.0 kHz
2.0 kHz	all exc. AM, FM	1.8 kHz	3.6 kHz
500 Hz	CW, RTTY, Packet	500 Hz	1.8 kHz
250 Hz	CW, RTTY	240 Hz	700 Hz
—	AM (wide)	6 kHz	15 kHz

Squelch sensitivity:

1.8 – 30 MHz (CW, SSB, AM): < 2.0 μV

28 – 30 MHz (FM): < 0.32 μV

IF rejection (1.8 – 30 MHz):

80 dB or better

Image rejection (1.8 – 30 MHz):

80 dB or better

IF shift range: ± 1.2 kHz

Maximum audio power output:

2 watts into 4 Ω with < 10% THD

Audio output impedance: 4 to 8 Ω

Specifications are subject to change, in the interest of technical improvement, without notice or obligation.

**Yaesu FL-2100B amplifier – unknown functionality — QTH.com \$380
minimum bid \$95**



Circuit	: Grounded Grid Class B
Frequency Coverage	: Ham bands 80 through 10 meters
Plate Input	: 1200 Watts PEP, 1000 Watts CW and 600 Watts AM
Plate voltage	: 2400 Volts DC
Drive Requirement	: 100 Watts PEP
Input Impedance	: 50 ohms, unbalanced
Output Impedance	: 50 - 75 ohms, unbalanced
Third Order Distortion	: 30 db or better at 1000 Watts PEP
Tube Complement	: 2 × 572B/T160
Cooling	: Forced-air cooling
Power Requirements	: AC 100, 110, 117 Volts 50/60Hz 18 Amps AC 200, 220, 234 Volts 50/60Hz 9 Amps
Dimensions	: 13 $\frac{1}{2}$ " Wide, 6" High, 11 $\frac{1}{2}$ " Deep
Weight	: 41 lbs

Yaesu FV-901DM Synthesized Scanning VFO, mates with FT901DM or FT902DM - unknown functionality — **Ebay \$270 minimum bid \$67**



SPECIFICATIONS

Frequency range	: 5.55–4.95 MHz
Output level	: 150 mV RMS into 50 ohms
Stability (+25°C)	: ± 300 Hz in first hour after 1 minute warm-up ± 50 Hz after 1 hour ± 1 kHz over temperature range –10°C – +60°C
Memory channels	: 40
Clarifier	: ± 2.5 kHz offset of transmit, receive, or transceive frequencies, on dial or memory mode
Power requirements	: 100/110/117/200/220/234 volts AC, 50/60 Hz 13.5 volts DC, negative ground (use only optional DC cable)
Power consumption	: AC – 13 VA (5.4 VA memory backup mode) DC – 0.53 amps (0.12 amps memory backup mode)
Case size	: 210(W) x 154(H) x 320(D) mm
Weight	: Approx. 4 kg.

Ten-Tec 538 Jupiter transceiver & 963 power supply- unknown functionality, no mic — [QRZ.com](https://www.qrz.com) \$740 minimum bid \$185



SPECIFICATIONS

GENERAL

MODULATION	LSB, USB, CW, AFSK, FM, AM.
FREQUENCY RANGE	Receive: 100 kHz – 30 MHz. Transmit: All amateur radio frequencies: 160 through 10 m.
DISPLAY	Multi-line text and graphic Liquid Crystal Display.
VFO	Dual VFOs with SPLIT transceive option.
OFFSET TUNING	+/- 10 kHz on receive and transmit.
MEMORIES	128 internal to Jupiter. - Virtually any PC will store thousands of memories in Pegasus Emulation Mode.
FREQUENCY ACCURACY	+/- 90 Hz at 25°C at 30 MHz for 1 year.
ANTENNA IMPEDANCE	50 ohms, SWR <2:1, unbalanced .
POWER REQUIRED	12-14 VDC @1.5 A receive, 20A transmit.
CONSTRUCTION	9 epoxy glass PC boards, molded front panel, aluminum chassis, textured painted steel cover.
DIMENSIONS	HWD = 5" x 12.125" x 13" (12.7 x 30.8 x 33 cm.) Depth includes heat sink on rear panel.
WEIGHT	12 lbs. (5.45 kg.)

TRANSMITTER

RF OUTPUT	5 – 100 watts, ALC stabilized.
DC INPUT	Maximum 250 watts @ 14 VDC. 100% duty cycle for up to 10 minutes. Continuous duty with user-supplied air cooling of rear panel heat sink.
MICROPHONE	4-pin front panel connector accepts 200 ohm to 50K ohm impedance microphones with 5 mV (-67 dB) output and provides DC polarizing voltage (+9 V) for electret microphones.
LINE INPUT	1 mV p-p into 47k Ohms.
T/R SWITCHING	PTT or VOX on SSB, Adjustable QSK on CW.
CW OFFSET	DSP generated: programmable 0 to 1270 Hz. Sidetone automatically matches offset.
FM DEVIATION	5 kHz peak.
METERING	Selectable: Forward power or SWR.
SSB GENERATION	DSP implementation of Weaver method SSB.

CARRIER SUPPRESSION	> 50 dB.
UNWANTED SIDEBAND SUPPRESSION	> 60 dB at 1.5 kHz.
THIRD ORDER INTERMODULATION	25 dB below two tones @ 100 watts PEP.
SPURIOUS OUTPUT	Better than 40 dB below peak power output.
<u>RECEIVER</u>	
SENSITIVITY	0.35 μ V typical for 10 dB S+N/N @ 3 kHz bandwidth, SSB mode. Equivalent to 11.35 dB noise figure.
SELECTIVITY	34 filters built-in with 1.5:1 or better shape factors (-6 to -60 dB): 300 Hz, 330 Hz, 375 to 750 Hz in 75 Hz increments, 750 Hz to 3 kHz in 150 Hz increments, 3 kHz to 6 kHz in 300 Hz increments, and 8.0 kHz.
SPURIOUS FREE DYNAMIC RANGE	90 dB @ 3 kHz bandwidth at 50 kHz tone spacing.
THIRD ORDER INTERCEPT	+10 dBm.
NOISE FLOOR	-126 dBm @ 3 kHz bandwidth.
S-METER	S9 calibrated to 50 μ V standard.
ATTENUATOR	20 dB, selectable by operator
PASSBAND TUNING	+/- 2 kHz.
I-F FREQUENCIES	1 st I-F 45 MHz, 2 nd I-F 455 kHz, 3 rd I-F 12 kHz.
I-F REJECTION>	60 dB typical.
IMAGE REJECTION	> 60 dB typical.
RECEIVE RECOVERY TIME	less than 20 ms, including SPLIT mode.
AUDIO	Speaker: 1 watts @ 4 ohms. Line out: > 1 V p-p into 600 ohms.
SPECTRUM SWEEP DISPLAY	8 widths from 240 Hz to 2.4 MHz, with tuning cursor and selectable Autosweep function.



**Cushcraft R7 vertical antenna 10, 12, 15,
17, 20, 30, 40M, Good condition per
Gerry, N6NV**

Donated by Ann Horrillo on behalf of Toni,
WB6KSO, SK

QRZ.com \$120 minimum bid \$30

SPECIFICATIONS

Frequency Bands (Meters)	10, 12, 15, 17, 20, 30, 40
Gain, dBi	3
Electrical Wavelength	
Each band	Half-wave
VSWR 1.2:1 Typical	
2:1 Bandwidth	10m (2.0 MHz), 12m (100 KHz) 15m (450 KHz), 17m (100 KHz), 20m (150 KHz) 30m (50 KHz), 40m (75 KHz)
Power Rating, Watts PEP	1800
Radiation Angle Typical	16°
Frequency Selection	Automatic
Horizontal Radiation Pattern, Degrees	360°
Height, ft. (m)	22.5 (6.9)
Mast Size Range, in. (cm)	1.5-1.75 (3.8-4.4)
Wind Load, ft. ² (m ²)	2.25 (.21)
Weight, lb. (kg)	12.3 (5.6)
48 in. (124 cm) Counterpoise Radials	7

TYPICAL R7 VSWR DATA

