



Table 1-1. Technical Characteristics.

Characteristic	Performance
	<u>Mechanical</u>
Weight	3,074 lbs (1394 kg)
Size	Height: 85 in (215.9 cm) including Blower B1 Width: 84 in (213.4 cm) Depth: 36 in (91.4 cm)
Finish:	Front Panel: Grey Cabinet: Black
	<u>Electrical</u>
Frequency Range:	2.8 to 10 MHz

Tuning:	Fully autotuned, preset tuning in # 6 seconds
Output RF Power:	Normal Mode: 10 kW nominal, 12 kW maximum into 1:1 VSWR, 8 kW minimum into 2.2:1 VSWR Bypass Mode: 100 Watts nominal
Output Power Programming:	10 kW to -60 dB, setable within ∇ 100 Watts
Output Impedance:	50 ohms nominal, unbalanced
Standing Wave Ratio:	2:1 nominal, 1:1 minimum, 2.2:1 maximum
Bandwidth:	-3.0 dB of 200 kHz, ∇ 0.5 dB over center 100 kHz of bandwidth.
Phase Response:	Input to output 5E within 10 Φ s of step change, 1.0% within 10 Φ s of power change
Input RF Power:	10 mW minimum at 50 ohms impedance
Harmonic:	# -80 dBc, # -120 dBc from 88-200 MHz
Output Noise:	SSB phase noise -58 dBc/Hz @ 10 Hz, -66 dBc/Hz @ 100 Hz, -74 dBc/Hz @ 1 kHz, -82 dBc/Hz @ 10 kHz, -100 dBc/Hz @ 100 kHz, -110 dBc/Hz @ \exists 1 MHz
Spurious Noise:	-80 dBc \exists ∇ 20 kHz, -120 dBc \exists 45 MHz, -150 dBc 88 to 200 MHz

Table 1-1. Technical Characteristics - Continued

Characteristic	Performance
<u>Electrical - Continued</u>	
Modulation Types:	FM/CW: FM THD # 5% at 100 kHz deviation (in Bypass Mode only) AM: Total Harmonic Distortion # 8% PM: Phase reversals up to 1 MHz rates CW: Output power proportional to square of 0-10 volt input control PULSED: 1 Φ s rise and fall time, on:off ratio 50 dBc FREQ. STEPPED: 10 Φ s amplitude recovery after inband frequency change
Power Source:	Primary: 480 V ac +5/-10%, 60 Hz ∇ 5%, 3 phase, power factor \geq 0.8 Auxiliary: 120 V ac +5/-10%, 60 Hz ∇ 5%, 1 phase
Efficiency:	\geq 45% at full power 50 Ω impedance
<u>Environmental</u>	
Ventilation:	Provided by squirrel cage type blowers mounted under each of the driver amplifiers. And a vaneaxial fan in the center section that provides positive air pressure within the entire cabinet
Ambient Temperature Range:	-4 °F to +122 °F (-20 °C to +50 °C) operating -76 °F to 140 °F (-60 °C to +60 °C) storage
Relative Humidity Range:	0 to 95% relative humidity, non-condensating
Altitude:	Up to 2,000 ft (609.6m) at up to 95 °F (+35 °C)
Shock and Vibration:	Normal handling & transportation