The Model 500L RF power amplifier is a general purpose laboratory instrument capable of moderate power outputs over a very wide range of frequencies. Consisting of hybrid integrated circuits mounted on a microstrip module, the 500L is designed to provide the user with maximum versatility at modest cost.

The amplifier will "boost" the output of any signal source by 27dB and provide more than 300 milliwatts of power from 2 to 500MHz. A linear Class A feedback design, its output is a faithful reproduction of the input waveform for AM, FM, SSB, CATV, and pulse modulations. Although flat gain is specified over the 2 to 500MHz frequency range, full power output is typically available from 1.7MHz to 560MHz.

The 500L is unconditionally stable and can be connected to any load impedance without failure or oscillation. An integral power supply permits operation over a wide range of line variations.

Frequency Coverage:	2 to 500MHz
Gain:	27dB nominal
Gain Variation:	±1dB maximum
Maximum Linear Power Output:	More than 300 Milliwatts
Harmonic Distortion:	All harmonics greater than 30dB below the fundamental at 200 milliwatts output. Lower distortion at reduced power.
Input/Output Impedance:	50 ohms, VSWR 2:1
Typical 3rd Order Intermodulation Intercept Point:	+38dBm
Noise Figure:	8dB typical
Power Requirements:	115, 230 VAC ±12% 50-400Hz at 12 watts
Size and Weight:	3⅞ x 6½ x 4 9/16 inches; 2½ lbs.
Operating Temperature:	0° to 45° C
Output Connectors:	BNC standard, SMA optional