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BROADBAND POWER AMPLIFIER

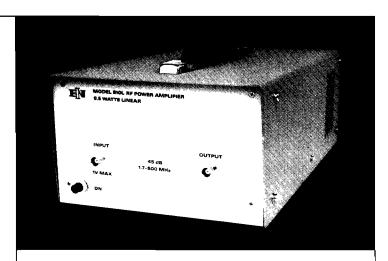
DESCRIPTION

The Model 510L is a general purpose broadband amplifier capable of more than 9.5 watts of linear power output when driven by any laboratory signal or sweep generator from 1.7 to 500 MHz.

An ultra linear Class A design, the 510L will "boost" the output of any signal source by a flat 45dB and provide its full forward output power into any load impedance (from an open to a short circuit)

Its output is a faithful reproduction of the input waveform for AM, FM, SSB, CATV, pulse and other complex modulations. Although specified only over the 1.7 to 500 MHz frequency range, full power output is typically available from 1.3 to 515 MHz.

The use of microwave transistors on thin film substrates. microstrip circuitry, and plug-in modules make the 510L both reliable and easy to service. An integral power supply and cooling system permit operation over a wide range of temperature and AC line conditions.



- All Solid State
- Flat 1.7 to 500 MHz
- 1.3 to 515 MHz Usable Coverage
- 9.5 Watts Linear Output
- 45dB Gain
- Microelectronic Construction

1.7 to 500 MHz Frequency Coverage:

45dB nominal Gain:

Gain Variation: ±1.5dB below 1 watt; ±2dB below

9.5 watts

Maximum Linear More than 9.5 watts **Power Output:**

Harmonic Distortion: All harmonics greater than

20dB below the fundamental at 9.5 watts output. Lower distortion at reduced power.

Typical 3rd Order Intermodulation Intercept Point:

+49dBM

Input/Output Impedance:

50 ohms

1.5 Maximum Input VSWR:

Output VSWR: 2.6 Maximum

11dB Noise Figure:

Stability: Unconditionally stable; unit

> will not oscillate for any condition of load and source

impedance.

Protection: Unit will withstand more than

16dB over drive (input signal of 1 V rms) for all output load

conditions.

115/230 VAC + 10%, 504 **Power Requirements:**

60 Hz, at 200 watts

514 x 81/2 x 15 in. Siza:

13.3 x 21.6 x 38.1 cm.

18 lbs. Weight: 8.2 kg.

0° to 45°C **Operating Temperature:**

Output Connector: BNC standard, SMA and type N optional

Rack Mounting: Adaptors provided