

# 411 LA

# ENI BROADBAND POWER AMPLIFIER

## DESCRIPTION

The Model 411LA is a general purpose broadband amplifier capable of more than 10 watts of linear power output when driven by any laboratory signal or sweep generator from 150 kHz to 300 MHz.

An ultra linear Class A design, the 411LA will "boost" the output of any signal source by a flat 40dB 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 for linear power output only, the 411LA will typically supply more than 15 watts of power before reaching saturation.

An integral power supply and cooling system permit operation over a wide range of temperature and AC line conditions. The use of plug-in modules makes the 411LA both reliable and easy to service.

## SPECIFICATIONS

**Frequency Coverage:** 150 kHz to 300 MHz

**Maximum Linear Power Output** More than 10 watts

**Input Signal:** Unit will accept CW, AM, FM, SSB, CATV, pulse and other complex modulations, limited only by their bandwidth and peak input level.

**Gain:** 40dB nominal

**Gain Variation:**  $\pm 1.5$  dB

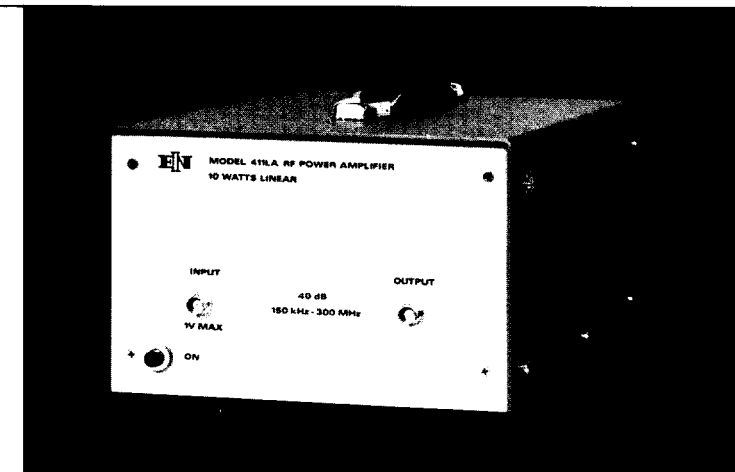
**Harmonic Distortion:** All harmonics greater than 25dB below the fundamental at 9.5 watts output. Lower distortion at reduced power.

**Typical 3rd Order Intermodulation Intercept Point** +49dBm

**Noise Figure:** 10dB

**Input/Output Impedance:** 50 ohms

**Input VSWR:** 1.6 maximum



- *All Solid State*
- *Flat 150 kHz to 300 MHz*
- *100 kHz to 320 MHz Usable Coverage*
- *10 Watts Linear Output*
- *No Bandswitching*
- *Works into Any Load*
- *Failsafe*

**Output VSWR:** 2.3 maximum

**Stability:** Unconditionally stable; unit will not oscillate for any condition of load and source impedances.

**Protection:** Unit will withstand a +17 dB overdrive (1 volt RMS) for all output load conditions, including short and open circuits.

**Power Requirements:** 115/230 VAC  $\pm 10\%$ , 50-60 Hz, at 120 watts.

**Size & Weight** 5.7 x 8.7 x 15.4 in.  
14.8 x 22 x 39.1 cm.  
22 lbs., 10 kg.

**Operating Temperature:** 0° to 45°C

**Output Connector:** BNC standard, SMA and Type N optional

**Rack Mounting\*:** Optional

411LA-R\*