

# 406 L

# ENI BROADBAND POWER AMPLIFIER

## DESCRIPTION

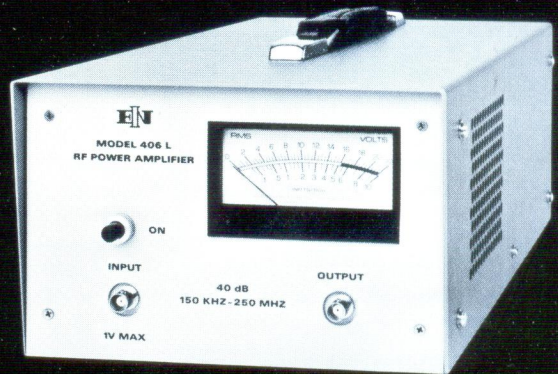
The ENI Model 406L RF power amplifier is a completely solid state unit, capable of providing more than 5 watts of RF power from 150 kHz to above 250 MHz.

A highly linear class A design, the Model 406L will amplify inputs of AM, FM, SSB, Pulse and other complex modulations, with minimum distortion. Flat gain response (40 dB) permits the unit to be driven to its full power output by any signal or sweep generator capable of supplying a minimum -3 dBm (.15 volts RMS) signal level into its 50 ohm input. Virtually all commercial signal and sweep generators are capable of supplying this signal.

The Model 406L is an extremely versatile source of RF power. Its output is electrically equivalent to an open circuit voltage source in series with a 50 ohm output resistance and may be connected to any load impedance, without regard to match. Unconditional stability and instantaneous failsafe provisions in the unit provide absolute protection from damage due to transient and overload conditions.

The amplifier operates over its entire frequency range without band-switching or other adjustments. Useful power output is available at frequencies above 250 MHz and below 150 kHz at reduced gain.

Output RF voltage, as well as power output into 50 ohms, is monitored by a front panel meter. An integral power supply permits operation directly from the AC line.



- *All Solid State*
- *Flat 150 kHz to 250 MHz*
- *5 Watts Linear Output*
- *No Bandswitching*
- *Works into Any Load*
- *Failsafe*
- *Metered Output*

## SPECIFICATIONS

<b>Frequency Coverage:</b>	150 kHz to above 250 MHz without tuning.	<b>Output VSWR:</b>	Less than 2
<b>Maximum Power Output:</b>	5 Watts CW and PEP (Peak Envelope Power) at rated distortion; higher output at increased distortion.	<b>Stability:</b>	Unconditionally stable.
<b>Input Signal:</b>	Unit will accept CW, AM, FM, SSB, CATV, pulse and other complex modulations, limited only by their bandwidth and peak input level.	<b>Protection:</b>	Unit will withstand a +17 dB overdrive (1 volt RMS) for all output load conditions, including short and open circuits.
<b>Gain:</b>	40 dB nominal.	<b>Output Metering:</b>	Average reading voltmeter, calibrated in RMS volts for a sine wave, with an accuracy of $\pm 6\%$ of full scale (0-22 volts); also calibrated in watts into 50 ohms (0-9 watts).
<b>Gain Variation:</b>	Less than $\pm 1.5$ dB from 150 kHz to 250 MHz.	<b>Power Requirements:</b>	115-230 Vac $\pm 10\%$ , 50-60 Hz, 70 watts.
<b>Harmonic Distortion:</b>	Typically better than 23 dB at 5 watts; 25 dB at 4 watts.	<b>Operating Temperature:</b>	0° to +45° C
<b>Typical 3rd Order Inter-modulation Intercept Point:</b>	+47 dBm	<b>Size and Weight:</b>	6 x 8½ x 15 in.; 18 lbs. 15.2 x 21.6 x 38.1cm.; 8.2 kg
<b>Noise Figure:</b>	Less than 10 dB.	<b>Input and Output Connectors:</b>	BNC
<b>Input VSWR:</b>	Less than 1.5		