3100 L

ENI BROADBAND POWER AMPLIFIER

DESCRIPTION

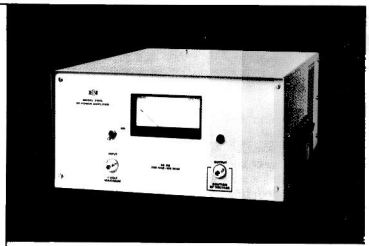
Capable of producing more than 100 watts of linear Class A power and up to 180 watts of pulse and saturated CW power, this compact instrument weighs less than seventy pounds and operates from ordinary single phase power receptacle.

Designed to replace bulkier, less efficient and more costly tube type amplifiers, the Model 3100L will provide full power over the frequency range of 250 kHz to 105 MHz and more than 50 watts of power at frequencies as low as 125 kHz and as high as 125 MHz.

A 50 ohm output impedance assures maximum power transfer to a 50 ohm load impedance. However, any load from a short to an open circuit, can be connected to the output without causing damage or oscillation.

Any signal generator, synthesizer or sweeper will supply adequate signal level to drive the Model 3100L. The unit will amplify AM, FM, SSB, TV, Pulse and other complex modulations with minimum distortion.

Output RF voltage level as well as power output into 50 ohms is monitored by a front panel meter. Both the integral power supply and cooling system are conservatively designed to permit operation over a wide range of temperature and AC line conditions.



- ***All Solid State***
- ***Flat 250 kHz to 105 MHz***
- ***125 KHz to 125 MHz Usable Coverage***
- ***100 Watts Linear Power***
- ***Up to 180 Watts Pulse and CW***
- ***Works into Any Load Impedance***
- ***Operates from 115/230 V Receptacle***
- ***Failsafe***

SPECIFICATIONS

Frequency Coverage:	125 kHz to 125 MHz
Gain:	50 dB
Gain Variation:	± 1.5 dB maximum from 250 kHz to 105 MHz
Maximum Linear Output:	More than 100 watts from 250 kHz to 105 MHz. More than 50 watts from 105 MHz to 125 MHz and from 125 kHz to 250 kHz.
Harmonic Distortion:	All odd harmonics more than 25 dB below signal at 75 watts output. All even harmonics more than 30 dB below signal at 100 watts output.
Typical 3rd Order Intermodulation Intercept Point:	+ 59 dBM
Input/Output Impedance:	50 ohms
Input VSWR:	less than 1.5
Output VSWR:	less than 2,250 kHz to 80 MHz
Noise Figure:	less than 10 dB
Stability:	Unconditionally stable; unit will not oscillate for any condition of load and source impedance.
Protection:	Unit will withstand up to 16 dB of overdrive (input signal of 1 v RMS) for all output load conditions including short and open circuit loads.
Output Meter:	Average reading volt meter calibrated in RMS volts for a sine wave, with an accuracy of ± 3% of full scale (0-100 volts); also calibrated in watts into 50 ohms (0-200 watts).
Power Required:	108-125 Vac; or 216-250 Vac, 50-60 Hz, 1100 watts.
Operating Temperature:	0° to + 40° C
Size:	8¾ x 17 x 17 in. 22.2 x 43.2 x 43.2 cm.
Weight:	69.5 lbs., 31.6 kg.
Connectors:	Type N
Rack Mounting:	Adaptors provided