



## 1020L POWER AMPLIFIER

200 Watts  
RF Power  
For:

- Medical
- Industrial
- Lab Use



- 10 KHz – 5 MHz
- Power Measurement
  - Forward & Reflected
- Solid State Reliability
- Forced Air Cooling

The 1020L Amplifier is a rugged source of RF power for ultrasonics, induction heating and laser modulation as well as plasma applications. It is a totally solid state solution employing RF DMoS FETs in the power amplification stages, offering simultaneous forward and reverse power readouts, and RS232 port for data collection. The 1020L reflects E&I's commitment to reliable and robust RF power.

### Flexible Operation:

The 1020L produces 200 Watts of quasi linear class AB power over a frequency range of 10 KHz to 5 MHz, with a nominal power gain of 53 dB (+/-1.5dB). Operation over the entire frequency range is possible without the need for any switching.

The front panel display provides simultaneous measurements of forward and reflected power as well as the unit's status. The RS232 connector at the rear of the unit can also be used to capture this data and reset the unit should a fault occur.

The E&I 1020L is a 19" rack mount unit 3U high. It employs an integral power supply capable of operation at 115 or 220 VAC, 50 – 60 Hz. The unit weighs approximately 45 lbs or 16 Kg.

# 1020L POWER AMPLIFIER

## Class of Operation

Class AB

## Frequency Range

10 KHz – 5 MHz

## Rated Power Output

200 Watts

## Saturated Power Output

300 Watts from 30 KHz – 4 MHz

## Power Gain

53 dB nominal

## Gain Flatness

+/- 1.5 dB

## Input Power for Rated Output

1.0 mW or 0 dBm

## Input Impedance / VSWR

50  $\Omega$  / 1.5:1 max

## Output Impedance / VSWR

50  $\Omega$  / 2:1 max

## Ruggedness

Any load VSWR, any phase from open to Short circuit without damage.

## Front Panel Accuracy

+/- 3% to 2 MHz

## Protection:

INPUT: unit will withstand up to +13dBm input without damage.

## Drive Source Requirements

Any signal Generator, function Generator or oscillator capable of up to  $V_{pp}$  into 50  $\Omega$

MISMATCH: the unit will tolerate any mismatch subject to thermal and current protection.

## Accessories Supplied

The unit is supplied with an operations manual and AC line cord.

## Temperature Range

0 – 45<sup>o</sup> C

## AC Requirements

100 – 240 VAC 47 – 63 Hz

4.5 A @ 120 V

2.25 A @ 240 V

## Cooling

Forced air

## Weight

32.5 lbs (14 kg)

## Dimensions

(H x W x D)

5.3" x 16.5" x 18.4"

134.5 x 420 x 467 mm



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