

1140LA POWER AMPLIFIER

1000 Watts RF Power For:

- Industrial
- Medical
- Lab Use



- 10 KHz 2 MHz
- Power Measurement
 - Forward & Reflected
- Solid State Reliability
- Forced Air Cooling

The 1140LA 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 1140LA reflects E&I's commitment to reliable and robust RF power.

Flexible Operation:

The 1140LA produces 1000 Watts of quasi linear class AB power over a frequency range of 10 KHz to 2 MHz, with a nominal power gain of 55 dB (+/-1dB). Operation over the entire frequency range is possible without the need for any switching. Operation up to 5 MHz is achieved with a lower power gain.

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 1140LA is a 19" rack mount unit 8U high. It employs an integral power supply capable of operation from 120 - 240 VAC, 50 –60 Hz. The unit weighs approximately 108 lbs or 48 Kg.

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Class of Operation Class AB

Frequency Range 10 KHz to 2 MHz

Rated Power Output 1,000 Watts

Power Gain 55 dB nominal

Gain Flatness +/- 1 dB

Input Power for Rated Output 5 mW or 0.7 dBm

Input Impedance 50 Ω / VSWR 1.5:1 Max

Output Impedance 50 Ω / VSWR 2:1 Max

Ruggedness

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

Front Panel Accuracy +/- 3% (up to 2 MHz)

Drive Source Requirements

Any signal Generator, function Generator or oscillator capable of up to 1.4 Vpp into 50 Ω

Protection:

INPUT: unit will withstand up to +16dBm input without damage.

THERMAL: the unit can operate at 45^oC ambient. If the internal temperature becomes too high the unit will shut down and an error message will appear on the front panel. The unit may be re-set by cycling the power or from the RS232 input.

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

Accessories Supplied

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

AC Power

100 – 240 VAC 208 VAC 13 Amps Max 120 VAC 25 Amps Max

Temperature Range $0 - 45^{\circ} C$

Cooling Forced air

Weight 108 lbs (49 kg)

Dimensions (H x W x D)

13.12" x 16.71" x 20.1" 333.2 x 424.4 x 510.1 mm



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