



100A2 POWER AMPLIFIER

100 Watts
RF Power
Per Channel
For:

- Ultrasonic
- Testing
- Laboratory use

- Dual Channel
- 300 KHz to 12 MHz
- Instantaneous Bandwidth
- 100 W 1dB Compression
- Solid State
- Air Cooled



The 100A2 Amplifier is a rugged source of RF power, useful for ultrasonics, laser modulation, RFI/EMI, plasma equipment and general laboratory and phased array applications. The 100A2 represents E&L's commitment to providing RF power amplifiers of the highest quality, durability and ruggedness.

FLEXIBILITY:

The 100A2 produces 100 Watts of Class A linear power output over the entire frequency range from 300 KHz to 12 MHz, from each channel. It has very low harmonic distortion along with low IMD products. Operation over the band is achieved without the need for any band switching or indeed any adjustments. The power gain is rated at 50 dB with a typical gain flatness of +/- 1.5 dB

The 100A2 is compatible with most signal generators, frequency synthesizers, sweep generators and other laboratory signal sources. It accurately reproduces all waveforms within its power and frequency ranges: AM, FM, SSB, pulsed and other complex modulation schemes.

RUGGEDNESS:

The 100A2 is built to withstand a 13 dBm input (1.0 Volt RMS) for any VSWR load condition. The internal switched mode power supply is very conservatively rated, in order to facilitate operation over a large range of line conditions and temperatures. The forced air cooling provides for low internal temperatures, providing long term reliability. The RF power is delivered by rugged DMoS FETs, de-rated to provide for excellent MTBF figures.

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Class of Operation

Class A

Frequency Range

300 KHz to 12 MHz

Rated Power Output

100 Watts (P1dB) / Channel

Saturated Power Output

300 KHz to 12 MHz > 120 W
Per channel

Gain

50 dB (nominal)

Gain Flatness

+/- 1.5 dB

Input Power for rated Pout

1 mW

Input Impedance / VSWR

50Ω / 1.5:1 maximum

Output Impedance / VSWR

50Ω / 2:1 maximum

Harmonic Level

< -25dBc

Ruggedness

∞:1 VSWR

Stability

Unconditional into any passive load or reactive load.

Protection

Input: Unit will withstand input signal of +13 dBm without damage (1.0 V rms) max. and infinite load VSWR.

Front Panel Meters

Two displays indicate up to 200 Watts into 50 Ω, displaying forward and reflected power simultaneously for each channel

Third Order Intercept Point

IP3 ~ 59 dBm

AC Input

100 – 240 VAC 47-63 Hz.

Temperature Range

0 – 40 C

Cooling

Forced air

Weight

45 lbs (16 Kg)

Dimensions

5.2 x 16.5 x 18.1 (H x W x D)



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