



## A500 POWER AMPLIFIER

### 500 Watts Linear RF Power for:

- Ultrasonics
- Testing
- Laboratory use



### Featuring:

- 300kHz – 35MHz
- Instantaneous Bandwidth
- 500W 1dB Compression
- Solid State
- Air Cooled

The A500 Amplifier is a rugged source of RF power, useful for ultrasonics, HF transmitters, RFI/EMI, plasma equipment and general laboratory applications. The A500 represents E&I's commitment to providing RF power amplifiers of the highest quality, durability and ruggedness.

### FLEXIBILITY:

The A500 produces 500 Watts of Class A linear power output over the entire frequency range from 300 kHz to 35 MHz. 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 60 dB with a typical gain flatness of +/- 1.5 dB

The A500 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 A500 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.

# A500 POWER AMPLIFIER

## Class of Operation

Class A

## Frequency Range

300 kHz to 35 MHz

## Rated Power Output

500 Watts (P1dB)

## Maximum Power Output

750 Watts

## Gain

60 dB (nominal)

## Gain Flatness

+/- 1.5 dB

## Input Power for rated Pout

0.5 mW

## Input Impedance / VSWR

50Ω / 1.5:1 maximum

## Output Impedance / VSWR

50Ω / 2:1 maximum

## Harmonic Level

< -23dBc

## Ruggedness

oo:1 VSWR

## Stability

Unconditional into any passive load

## Protection

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

## Front Panel Display

Indicates forward and reflected power

## Third Order Intercept Point

IP3 ~ 63 dBm

## AC Input

200–240 VAC 47-63 Hz

Max current 20 Amps @ 208 VAC

## Temperature Range

0 – 40 C

## Cooling

Forced air

## Weight

190 lbs (86 Kg)

## Dimensions (H x W x D)

25 x 17 x 20 inches

635 x 432 x 508 mm



Electronics & Innovation, Ltd.

150 Research Blvd.

Rochester, NY 14623

Tel: +1 585-214-0598

[www.eandiltd.com](http://www.eandiltd.com) | [sales@eandiltd.com](mailto:sales@eandiltd.com)