

A500 POWER AMPLIFIER

500 Watts RF Power For:

- Ultrasonic
- Testing
- Laboratory use
- 300 KHz to 35 MHz
- Instantaneous Bandwidth
- 500 W 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)

Saturated Power Output

700 W Maximum

Gain

60 dB (nominal)

Gain Flatness

+/- 1.5 dB

Input Power for rated Pout

0.5 mW Max

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

 $0 - 40^{\circ}$ 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



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