

# A-500 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 A-500 Amplifier is a rugged source of RF power, useful for ultrasonics, HF transmitters, RFI/EMI, plasma equipment and general laboratory applications. The A-500 represents E&I's commitment to providing RF power amplifiers of the highest quality, durability and ruggedness.

#### **FLEXIBILITY:**

The A-500 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 A-500 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 A-500 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.

# A-500 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

 $50\Omega$  / 1.5:1 maximum

#### Output Impedance / VSWR

50Ω / 1.25:1 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 50-60 Hz Max current 20 Amps @ 208 VAC

# Temperature Range

0 - 40 C

### Cooling

Forced air.

### Weight

190 lbs (86 Kg)

#### **Dimensions**

H = 25" (635 mm)

W = 17"(432 mm)

D = 20" (508 mm)



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