

# A-300 POWER AMPLIFIER

# 300 Watts RF Power For:

- Ultrasonic
- Testing
- Laboratory use
- 300 KHz to 35 MHz
- Instantaneous Bandwidth
- 300 W 1dB Compression
- Solid State
- Air Cooled



The A-300 Amplifier is a rugged source of RF power, useful for ultrasonics, HF transmitters, RFI/EMI, plasma equipment and general laboratory applications. The A-300 represents E&I's commitment to providing RF power amplifiers of the highest quality, durability and ruggedness.

#### **FLEXIBILITY:**

The A-300 produces 300 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 55 dB with a typical gain flatness of +/- 1.5 dB

The A-300 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-300 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.

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# **Class of Operation**

Class A

# Frequency Range

300 KHz to 35 MHz

### Rated Power Output

300Watts (P1dB)

#### Saturated Power Output

>500 W - 300 KHz - 25 MHz >400 W - 25 MHz - 35 MHz

#### Gain

55 dB (nominal)

#### **Gain Flatness**

+/- 1.5 dB

#### Input Power for rated Pout

1 mW Max

## Input Impedance / VSWR

 $50\Omega$  / 1.5:1 maximum

#### Output Impedance / VSWR

 $50\Omega$  / 1.25:1 maximum

#### Harmonic Level

< -24dBc

#### 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**

100 – 240 VAC 47-63 Hz. 15 A @ 120 V 7.5 A @ 240 V

#### **Temperature Range**

0 - 40 C

## Cooling

Forced air.

#### Weight

95 lbs (43 Kg)

#### **Dimensions**

(H x W x D) 13.12" x 16.71" x 20.1" 333.2 mm x 424.4 mm x 510.1mm



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