



## M-1020-T RF Amplifier Module

### 200 Watts RF Power for:

- Driving Transducers
- Broadband Testing
- Laboratory Applications



### Featuring:

- 10 kHz – 5 MHz
- 200W 1dB Compression
- 53dB Power Gain
- Solid State Reliability

The M-1020-T Amplifier Module is a rugged source of RF power, useful for ultrasonics, laser modulation, RFI/EMI, plasma equipment and general laboratory applications. This module is designed to be integrated into a system. It requires a DC voltage input and forced air cooling. The M-A075 represents E&I's commitment to providing RF power amplifiers of the highest quality, durability and ruggedness.

### FLEXIBILITY:

The M-1020-T produces 200 Watts of Class AB linear power output over the entire frequency range from 10kHz to 5MHz. It has 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 53 dB with a typical gain flatness of +/- 1.5 dB

### RUGGEDNESS:

The M-1020-T is built to withstand VSWR load condition at power levels of up to 200 watts. The RF power is delivered by rugged DMoS FETs, de-rated to provide for excellent MTBF figures.

# M-1020-T

## POWER AMPLIFIER

### Operation Class

Class AB Linearity

### Frequency Range

10 kHz to 5 MHz

### Rated Power Output

200 Watts (P1dB)

### Saturated Power Output

300 Watts from 30 kHz – 4 MHz

### Power Gain

53 dB (nominal)

### Gain Flatness

+/- 1.5 dB

### Input Power for rated Pout

1 mW or 0 dBm

### Input Impedance / VSWR

50  $\Omega$  / 1.5:1 maximum

### Output Impedance / VSWR

50  $\Omega$  / 2:1 maximum

### Ruggedness

oo:1 VSWR

Any load VSWR, any phase from open to short circuit without damage

### Stability

Unconditional into any passive load

### Protection

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

### Drive Source Requirements

Any signal generator, function generator or oscillator capable of up 0.65 Vpp into 50  $\Omega$

### Third Order Intercept Point

IP3 ~ 60 dBm

### DC Input

24 V @ 2.2 A

42 Vdc @ 8.0 A

### Temperature Range

0 – 40 C

### Cooling

Forced air required to ensure heat-sink temperature is maintained at 85C or below

### Weight

12 lbs. (5.5 kg)

### Dimensions

To fit in a space of: (H x W x D)

6 X 4.5 X 10 inches

15.2 X 11.5 x 25.4 cm.



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