



M-2100-T RF Amplifier Module

100 Watts
RF Power
For:

- Ultrasonic
 - Testing
 - Laboratory use
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- 10 KHz to 12 MHz
 - Instantaneous Bandwidth
 - 100 W 1dB Compression
 - Solid State



The M-2100-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 in to a system. It requires a DC voltage input and forced air cooling. The M-2100-T represents E&I's commitment to providing RF power amplifiers of the highest quality, durability and ruggedness.

FLEXIBILITY:

The M-2100-T produces 100 Watts of Class A linear power output over the entire frequency range from 10 KHz to 12 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 50 dB with a typical gain flatness of +/- 1.5 dB

RUGGEDNESS:

The M-2100-T is built to withstand VSWR load condition at power levels of up to 100 watts . The RF power is delivered by rugged DMoS FETs, de-rated to provide for excellent MTBF figures.

M-2100-T POWER AMPLIFIER

Class of Operation

Class A

Frequency Range

10 KHz to 12 MHz

Rated Power Output

100 Watts (P1dB)

Saturated Power Output

125 – 150 Watts

Gain

50 dB (nominal)

Gain Flatness

+/- 1.5 dB

Input Power for rated Pout

1 mW Max

Input Impedance / VSWR

50Ω / 1.5:1 maximum

Output Impedance / VSWR

50Ω / 2:1 maximum

Harmonic Level

< -25dBc @ 100 Watts

Ruggedness

∞: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 at power levels up to 100 watts.

Third Order Intercept Point

IP3 ~ 60 dBm

DC Input

24 V @ 1 amp

42 Vdc @ 9 amps (100 W)

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:

6 X 4.5 X 10 inches

15.2 X 11.5 x 25.4 cm.



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