Micom RM1200 Power Amplifer

Advanced HF radio solutions

1 KW Amplifier

Designed to work with Micom HF radio transceivers, the Micom RM1200 power amplifier delivers the most reliable communications for a wide range of operational applications.

With it's strict precision design, the fully solid-state amplifier features the latest and most advanced technology, providing exceptional linearity, efficiency and operating dependability for HF radio voice and data communications.



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MicomRM1200 **Power Amplifer**

Maximum Durability and Communication Reliability

 Conservatively rated circuits deliver full power, hour after hour, for voice, CW and data (RTTY, ARO, PACKET) service

• The amplifier circuitry is designed for the rapid switching inherent in ARQ operation. Reliability of ARQ systems is further improved by the stronger signal from a 1 KW amplifier

• 100% solid state, modular design - MOS-FET power transistors in interchangeable and field replaceable 300 modules - consumes less power than tube amplifiers and allows for easy servicing

 Antenna mismatch protection prevents amplifier damage and spurious energy in case of an extreme antenna mismatch

 With Failsoft operation, dual power supplies and parallel amplifier modules maintain operation at reduced power even in the unlikely event of total failure, allowing uninterrupted communications

· Built-in protective circuitry ensure amplifier is not damaged during abnormal conditions

Options

• Rack 19"

18 DBB1 for interface with other radios

User-friendliness

 Full compatibility with all Micom radios allows maximum flexibility in systems designs. Amplifier can also operate with an existing system

· Broadband design provides fully automatic tuning and adjustments

- · Current and Power meters allow for easy monitoring.
- · Remote control panel offers convenient amplifier operating and control

 Controller board incorporating a 16-bit micro processor centralizes all sensory status information and controls the amplifier's band selection, autotuner operation, maintenance and protective functions

Built-in-Test Equipment for exceptional amplifier dependability

Bite RS232 Interface Protection

- Amplifier module current imbalance
- Out-of-band frequency input
- Short and Open RF output
- Input overdrive
- Over-current
- Under voltage%
- High temperature
- High VSWR

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Electrical

Power output

	(±0.5 dB) into 1.5:1 VSWR
	4:1 VSWR - min 50% power
Frequency range	1.6-30 MHz
Power input	20 Watts nominal
	(0 dBm option)
Harmonic emission	-60 dBc
Frequency switching	Tuning process (100 msecO max
	between switching channels)
Input impedance:	50 Ohm
T/R switching:	10 msec maximum
R/T switching	10 msec maximum
Rx bypass mode	Rx/Tx switch, active at receive

Environmental

Temperature	-10°C to +60°C
Humidity	95% @ 50°C
Input RF	N type connector
Output RF	N type connector
Control/Monitor	D type 25 pins connector (including PTT, BIT, VSWR, Incident power, Tune mode, on/off)

1200 W PEP

1000 W average

Features

19 inch rack mountable Supply AC voltage Redundancy

90-264 VAC, 47-63% (single phase) power supply (2 modules) 2 Amplifiers 600 each 125 Watt from the micom

Automatic bypass backup Manual bypass selection Automatic step-down power levels

Specifications

Model

to be used with transceivers

FLN3175 micomRM125, model: M91AMN0KV5-K & G638 micomRM125R, model: M95AMN0KV5-K & G638

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