

# RF Power Amplifier

# Model RF1172

Solid State - High Power - Broadband - 80MHz – 1000MHz

The RF1172 is a 200 Watt broadband amplifier that covers the 80 to 1MHz frequency range. This amplifier utilizes Class A linear power devices that provide an excellent 3<sup>rd</sup> order intercept point, high gain, and a wide dynamic range. This amplifier can be fitted with a front panel controller feature that adds many facilities and additional protections. See overleaf.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability.

Like all Laplace RF series amplifiers, the RF1172 comes with an extended multiyear warranty backed by commitment to total customer satisfaction.

## Specifications @ 25°C

<b>Electrical</b>		
1	Frequency Range	80 – 1000MHz
2	Saturated Output Power	200 Watts Minimum
3	Power at P1dB	120W Min.
4	Small Signal Gain	+54 dB Minimum
5	Gain Flatness	+2.5 dB Maximum
6	IP <sub>3</sub>	+59 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc min @ 120 Watts
9	Spurious Signals	< -60 dBc typical @ 120 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	1,200 Watts Maximum
12	AC Input	100 – 240 VAC, single phase
13	RF Input	0 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	Class A
<b>Mechanical</b>		
16	Dimensions	19" x 5.25" x 21" 3RU
17	Weight	25 kg.
18	RF Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
<b>Environmental</b>	Operating Temperature	
21	Operating Humidity	0° C to +50° C
22	Operating Altitude	95% Non-condensing
23	Shock and Vibration	Up to 10,000' Above Sea Level



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## FRONT PANEL CONTROLLER FEATURES

- Forward Power Monitoring (dBm or Watts)
- Reflected Power Monitoring (dBm or Watts)
- Gain Control (20 dB dynamic range of adjustment)
- Fault Status - Full Protection Of any VSWR Condition, Open or Short, into any Phase Angle
- Remote Control Access via the Ethernet, RS-232, or IEEE-488 Communications ports
- Integrated Automatic Leveling Control to allow end-user to maintain output even with variances in temperature, or input RF level
- Standby/Enable Control
- Front Panel Display for easy viewing of System Status Locally
- Keypad buttons for full local control

## CIRCUIT PROTECTIONS

- Thermal Overload
- Over Current
- Over Voltage
- Open or Short VSWR Conditions (With Front Panel Controller)

## CIRCUIT CONTROL (WITH FRONT PANEL CONTROLLER)

- Standby (amplifier disable)
- Gain/power setting with 20dB range
- VSWR protection Rese
- ALC On/ Off

## CIRCUIT INDICATIONS (WITH FRONT PANEL CONTROLLER)

- Forward Power
- Reflected power
- VSWR Fault
- Temp Fault
- Gain Setting (VVA) percentage

## RFPA SYSTEM OPTIONS

- Switched Filter Bank
- Input Power Requirements
- Ruggedized Version
- Cabinet Requirements
- Outdoor Version
- Sample Ports
- Racking Options
- Many More!

### Ordering information:

RF1172F	RF connections on front panel
RF1172R	RF connections on rear panel
RF1172FE	RF connections on front panel with front panel control option.
RF1172RE	RF connections on rear panel with front panel control option.



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