Solid State Broadband High Power RF Amplifier

The 5089 is a 1000 Watt broadband amplifier that covers the 0.01-200 MHz frequency range. This amplifier utilizes Class AB linear power devices that provide an excellent 3rd order intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability. Like all OPHIRRF amplifiers, the 5089 comes with an extended multiyear warranty backed by Ophir RF’s commitment to total customer satisfaction.

**Parameter** | **Specification @ 25º C**
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1. Frequency Range | 0.01 – 200 MHz
2. Saturated Output Power | 1000 Watts typical
3. Power Output @ 1dB Comp. | 500 Watts min
4. Small Signal Gain | +61 dB min
5. Gain Flatness | ± 4.0 dB min
6. IP3 | +63 dBm min
7. Input VSWR | 2:1 max
8. Harmonics | -15 dBc typical @ 500 Watts
9. Spurious Signals | -60 dBc typical @ 500 Watts
10. Input/Output Impedance | 50 Ohms nominal
11. AC Input Power | 5000 Watts max
12. AC Input | 186 – 264 VAC single phase
13. Nominal RF Input | 0 dBm
14. RF Input Overdrive | +10 dBm max
15. RF Input Signal Format | CW/AM/FM/PM
16. Class of Operation | AB

**Mechanical**

17. Dimensions* (W x H x D) | 19” x 26.25” x 26” 3.5RU Chassis
18. Weight* | 360 lb. max
19. RF Connectors | Type-N
20. Grounding | Chassis
21. Cooling | Internal Forced Air

**Environmental**

22. Operating Temperature | 0º C to +50º C
23. Operating Humidity | 95% Non-condensing
24. Operating Altitude | Up to 10,000' Above Sea Level
25. Shock and Vibration | Normal Truck Transport

Specifications subject to change without notice.
MODEL 5089
10 kHz - 200 MHz
1000 WATTS
LINEAR POWER RF AMPLIFIER

FRONT PANEL CONTROLLER FEATURES (Optional)
◊ Forward Power Monitoring
◊ Reflected Power Monitoring
◊ 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 CONTROL (WITH FRONT PANEL CONTROLLER)
◊ Standby (amplifier disable)
◊ Gain/power setting with 20dB range
◊ VSWR protection Reset
◊ ALC On/ Off

CIRCUIT INDICATIONS (WITH FRONT PANEL CONTROLLER)
◊ Forward Power
◊ Reflected power
◊ VSWR Fault
◊ Temp Fault
◊ Gain Setting (VVA) percentage

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

RFPA SYSTEM OPTIONS
◊ Switched Filter Bank
◊ Input Power Requirements
◊ Ruggedized Version
◊ Cabinet Requirements
◊ Outdoor Version
◊ Sample Ports
◊ Racking Options
◊ Many More!
◊ Consult Factory with Specific Requirements

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