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MODEL 5089

10 kHz - 200 MHz
1000 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5089 is a 1,000 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 OPHIR_{RF} amplifiers, the 5089 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	Parameter	Specification @ 25° C
Electrical		
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	IP ₃	+63 dBm min
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 500 Watts
9	Spurious Signals	-60 dBc typical @ 500 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	6,400 Watts max
12	AC Input	208 ± 10% VAC, 3φ
13	Nominal RF Input	0 dBm
14	RF Input Overdrive	+3 dBm max
15	RF Input Signal Format	CW/AM/FM/PM
16	Class of Operation	A/AB
Mechanical		
17	Dimensions* (W x H x D) Overall Dim. w/ Rack	19" x 22.75" x 30.75" (1) 5RU Chassis (2) 8RU Chassis
18	Weight	400 lbs. max
19	RF Connectors	Type-N
20	Grounding	Chassis
21	Cooling	Internal Forced Air
Environmental		
22	Operating Temperature	0° C to +50° 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



ORDERING MODELS

- RE Rear RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232
- FE Front RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232
- R Rear RF Connector model
- F Front RF Connector model



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FRONT PANEL CONTROLLER FEATURES (*Optional*)

- ◇ - 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 Reset
- ◇ - 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!
- ◇ - **Consult Factory with Specific Requirements**



 ACCREDITED MANAGEMENT SYSTEMS CERTIFICATION BODY	Certified to ISO 9001:2015	 TÜV Rheinland® Precisely Right.
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