



5300 Beethoven Street, Los Angeles, CA 90066  
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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 3<sup>rd</sup> 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<sub>RF</sub> amplifiers, the 5089 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.



	<u>Parameter</u>	<u>Specification @ 25° C</u>
<b><u>Electrical</u></b>		
1	Frequency Range	0.01 – 200 MHz
2	Saturated Output Power	0.01 - 160 MHz 1000 Watts Typ. 160 - 200 MHz 650 Watts Typ.
3	Power Output @ 1dB Comp.	0.01 - 160 MHz 500 Watts Typ. 160 - 200 MHz 300 Watts Typ.
4	Small Signal Gain	+61 dB min
5	Gain Flatness	± 4.0 dB min
6	IP <sub>3</sub>	+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	4,800 Watts max
12	AC Input	208 ± 10% VAC, 3ø
13	Nominal RF Input	0 dBm
14	RF Input Overdrive	<b>+3 dBm max</b>
15	RF Input Signal Format	CW/AM/FM/PM
16	Class of Operation	A/AB
<b><u>Mechanical</u></b>		
17	Dimensions (H x W x D) Overall Dim. w/ Rack	31" x 24" x 31" (1) 5RU Chassis (1) 8RU Chassis
18	Weight	325 lbs.
19	RF Connectors	Type-N
20	Grounding	Chassis
21	Cooling	Internal Forced Air
<b><u>Environmental</u></b>		
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



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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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**MADE IN USA**



0523 Approved By: \_\_\_\_\_ Date: \_\_\_\_\_