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MODEL 5194-001

2.0 - 6.0 GHz
100 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5194-001 is a 100 Watt broadband amplifier that covers the 2.0 – 6.0 GHz frequency range. This small and lightweight amplifier utilizes Class A 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 5194-001 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	Parameter	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	2.0 – 6.0 GHz
2	Saturated Output Power	100 Watts typical
3	P1dB Output Power	80 Watts Minimum
4	Small Signal Gain	+53 dB min
5	Power Flatness	± 3.0 dB max
6	IP ₃	+54 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical
9	Spurious Signals	< -60 dBc typical
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	2000 Watts max
12	AC Input	100 – 240 VAC, single phase
13	RF Input	+3 dBm max without damage
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A
<u>Mechanical</u>		
16	Dimensions	19" x 8.75" x 24"
17	Weight	92.25 Lbs.
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
<u>Environmental</u>		
21	Operating Temperature	0° C to +50° C
22	Operating Humidity	95% Non-condensing
23	Operating Altitude	Up to 10,000' Above Sea Level
23	Shock and Vibration	Normal Truck Transport

Specifications subject to change without notice



FE Model Shown

ORDERING MODELS

- ◇ R - Rear Panel Connector Model
- ◇ F - Front Panel Connector Model
- ◇ RE - Rear Panel Connector Model with Ethernet, IEEE488 and RS232 Communication Ports
- ◇ FE - Front Panel Connector Model with Ethernet, IEEE488 and RS232 Communication Ports



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FRONT PANEL CONTROLLER FEATURES

- ◇ Forward Power Monitoring
- ◇ Reflected Power Monitoring
- ◇ Gain Control (Continuously Variable VVA 20dB)
- ◇ 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, phase 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**

