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MODEL 5194

2.0 - 6.0 GHz
100 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5194 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 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	Parameter	Specification @ 25° C
Electrical		
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 @ 80W
9	Spurious Signals	< -60 dBc typical @ 80W
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	1,800 Watts max
12	AC Input	100 – 240 VAC, single phase
13	RF Input	0 dBm nominal +3 dBm max without damage
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A
Mechanical		
16	Dimensions	19" x 5.25" x 26"
17	Weight	72 Lbs.
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
Environmental		
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

- 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

- ◇ - 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**

