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MODEL 5194-100

**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	P1dB Output Power	2.0-4.0GHz: 100 Watts Minimum 4.0-6.0GHz: 50 Watts Minimum
3	Small Signal Gain	+53 dB min
4	Power Flatness	± 3.0 dB max
5	IP ₃	+54 dBm typical
6	Input VSWR	2:1 max
7	Harmonics	-20 dBc typical
8	Spurious Signals	< -60 dBc typical
9	Input/Output Impedance	50 Ohms nominal
10	AC Input Power	2000 Watts max
11	AC Input	100 – 240 VAC, single phase
12	RF Input	+3 dBm max without damage
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	A
Mechanical		
15	Dimensions	19" x 8.75" x 24"
16	Weight	92.25 Lbs.
17	Connectors	Type-N
18	Grounding	Chassis
19	Cooling	Internal Forced Air
Environmental		
20	Operating Temperature	0° C to +50° C
21	Operating Humidity	95% Non-condensing
22	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

Approved By: _____ Date: _____



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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**



Certified to
ISO 9001:2008



Precisely Right.