

5300 Beethoven Street, Los Angeles, CA 90066 TEL: (310)306-5556 • FAX: (310)821-7413 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 5194-700

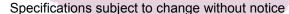
2.0 - 6.0 GHz **100 WATTS** LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5194-700 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 5194-700 comes with extended multiyear warranty backed Ophir RF's by commitment to total customer

| | <u>Parameter</u> | Specification @ 25° C |
|----------------------|------------------------|-------------------------------|
| <u>Electrical</u> | | |
| 1 | Frequency Range | 2.0 – 6.0 GHz |
| 2 | Saturated Output Power | 100 Watts Minimum |
| 3 | P1dB Output Power | 80 Watts Minimum |
| 4 | Small Signal Gain | +53 dB min |
| 5 | Power Flatness | <u>+</u> 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 | 0 dBm |
| 14 | RF Input Signal Format | CW/AM/FM/PM/Pulse |
| 15 | Class of Operation | Α |
| <u>Mechanical</u> | | |
| 16 | Dimensions | 19" x 8.75" x 24" |
| 17 | Weight | 65 lb. max |
| 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 |





ORDERING MODELS

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

| Approved By: | Data |
|--------------|-------|
| ADDIOVEU DV. | 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



