



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 5191**  
**2 - 6 GHz**  
**20 WATTS**  
**LINEAR POWER RF AMPLIFIER**

**Solid State  
 Broadband High Power  
 RF Amplifier**

The 5191 is a 20 Watt broadband amplifier that covers the 2 – 6 GHz frequency range. This small and lightweight amplifier utilizes Class A/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 5191 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	Parameter	Specification @ 25° C
<b>Electrical</b>		
1	Frequency Range	2 – 6 GHz
2	Output Power at PSAT	20 Watts Minimum
3	Output Power at P <sub>1dB</sub>	12 Watts Minimum
3	Small Signal Gain	+43 dB min
4	Power Flatness	± 1.5 dB max
5	IP <sub>3</sub>	+50 dBm typical
6	Input VSWR	2:1 max
7	Harmonics	-15 dBc typical @ 12 W
8	Spurious Signals	< -60 dBc typical @ 12W
9	Input/output Impedance	50 Ohms nominal
10	AC Input Power	400 Watts max
11	AC Input	100 – 240 VAC, single phase
12	RF Input	0 dBm nominal <b>+6dBm max.</b>
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	A/AB
<b>Mechanical</b>		
15	Dimensions	19" x 5.25" x 20"
16	Weight	37 Lbs.
17	Connectors	Type-N
18	Grounding	Chassis
19	Cooling	Internal Forced Air
<b>Environmental</b>		
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

**ORDERING MODELS**



**FE MODEL SHOWN**

- ◇ 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



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

<p><b>MODEL 5191</b></p> <p><b>2 - 6 GHz</b> <b>20 WATTS</b> <b>LINEAR POWER RF AMPLIFIER</b></p>
---

### **FRONT PANEL CONTROLLER FEATURES (Optional)**

- ◇ Forward Power Monitoring
- ◇ Reflected Power Monitoring
- ◇ 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 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**

