

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 5291**

0.6-6.0 GHz 10 WATTS LINEAR POWER RF AMPLIFIER

### Solid State Broadband High Power RF Amplifier

The 5291 is a 10 Watt broadband amplifier that covers the 0.6-6.0 GHz frequency range. This small and lightweight amplifier utilizes Class A 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  $\mathsf{OPHIR}_{\mathsf{RF}}$  amplifiers, the 5291 comes with an extended multiyear warranty backed by  $\mathsf{Ophir}$  RF's commitment to total customer satisfaction.

	<u>Parameter</u>		Specific	cation @ 25° C	
<u>Electrical</u>		Minimum	Nominal	<u>Maximum</u>	<u>Unit</u>
1	Frequency Range	0.6		6.0	GHz
2	Power at P <sub>SAT</sub>	8	10		Watts
3	Power at P <sub>1dB</sub>	5	7		Watts
4	Small Signal Gain	41			dB
5	Gain Flatness			<u>+</u> 2.0	dB
6	IP <sub>3</sub>		44		dBm
7	Input VSWR			2:1	Ratio
8	Harmonics @ 7W		-20		dBc
9	Spurious Signals @ 7W		-60		dBc
10	Input/Output Impedance		50		Ohms
11	AC Input Power			350	Watts
12	AC Input	110-240 VAC Single Phase 47-63 Hz			
13	RF Input		0	+0	dBm
14	RF Input Signal Format	CW/AM/FM/PM/Pulse			
15	Class of Operation	Class A			
<u>Mechanical</u>					
16	Dimensions H x W x D	5.25" x 19" x 21"			
17	Weight		38		Lbs.
18	RF Connectors	Type-N Female Input Type-NFemale Output			
19	Grounding	Chassis			
20	Cooling	Internal Forced Air			
<u>Environmental</u>					
21	Operating Temperature	0		50	° C
22	Operating Humidity	95% Non-condensing			
23	Operating Altitude	Up to 10,000' Above Sea Level			
24	Shock and Vibration	Normal Truck Transport			

Specifications subject to change without notice

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## FRONT PANEL CONTROLLER (With Optional Front Panel Controller)

- 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 Optional Front Panel Controller)

## **CIRCUIT CONTROL (With Optional Front Panel Controller)**

- ♦ Standby (amplifier disable)
- Gain/power setting with 20dB range
- VSWR protection Reset
- ♦ ALC On/ Off

#### **CIRCUIT INDICATION**

- ♦ Forward Power (With Optional Front Panel Controller)
- Reflected power (With Optional Front Panel Controller)
- VSWR Fault (With Optional Front Panel Controller)
- Gain Setting (VVA) percentage (With Optional Front Panel Controller)

#### **RFPA SYSTEM OPTIONS**

- ♦ Switched Filter Bank
- ♦ Input Power Requirements
- ♦ Ruggedized Version
- ♦ Cabinet Requirements
- ♦ Outdoor Version
- ♦ Sample Ports
- ♦ Racking Options
- ♦ Front Panel Controller ("E" Option)
- Consult Factory with Specific Requirements

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# FE Model Front RF Connectors/Front Panel Controller

#### **ORDERING MODELS**

- ♦ R Rear RF Connector model
- ♦ F \_ Front RF Connector model
- ♦ 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

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