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MODEL 5291
0.7-6.0 GHz
15 WATTS
LINEAR POWER RF AMPLIFIER

**Solid State
 Broadband High
 Power RF
 Amplifier**

The 5291 is a 15 Watt broadband amplifier that covers the 700-6000 MHz frequency range. This 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 5291 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

| | <u>Parameter</u> | <u>Specification @ 25° C</u> |
|-----------------------------|------------------------|-------------------------------|
| <u>Electrical</u> | | |
| 1 | Frequency Range | 0.7-6.0 GHz |
| 2 | Saturated Output Power | 15 Watts Nominal |
| 3 | Power at P1dB | 10 Watts Minimum |
| 4 | Small Signal Gain | +42 dB Minimum |
| 5 | Gain Flatness | ± 5.0 dB Maximum |
| 6 | IP ₃ | +45 dBm typical |
| 7 | Input VSWR | 2:1 max |
| 8 | Harmonics | -20 dBc min @ 10 Watts |
| 9 | Spurious Signals | < -60 dBc typical @ 10 Watts |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | AC Input Power | 350 Watts Maximum |
| 12 | AC Input | 110 – 240 VAC, single phase |
| 13 | RF Input | 0 dBm max |
| 14 | RF Input Signal Format | CW/AM/FM/PM/Pulse |
| 15 | Class of Operation | Class A |
| <u>Mechanical</u> | | |
| 16 | Dimensions | 19" x 5.25" x 21" |
| 17 | Weight | 46 Lbs. |
| 18 | RF Connectors | Type-N |
| 19 | Grounding | Chassis |
| 20 | Cooling | Internal Forced Air |
| <u>Environmental</u> | | |
| 21 | Operating Temperature | 0° C to +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



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 (*Optional*)

- ◇ - 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 a steady output level 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 20 dB 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**

