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MODEL 5290

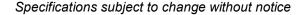
0.7-6.0 GHz 8 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5290 is a 8 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 5290 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

| | <u>Parameter</u> | Specification @ 25° C | | |
|----------------------|------------------------|---|--|--|
| Electrical | | | | |
| 1 | Frequency Range | 0.7-6.0 GHz | | |
| 2 | Saturated Output Power | 8 Watts Nominal | | |
| 3 | Power at P1dB | 5 Watts Minimum | | |
| 4 | Small Signal Gain | +39 dB Minimum | | |
| 5 | Gain Flatness | ± 5.0 dB Maximum +43 dBm typical | | |
| 6 | IP ₃ | | | |
| 7 | Input VSWR | 2:1 max -20 dBc min @ 5 Watts | | |
| 8 | Harmonics | | | |
| 9 | Spurious Signals | < -60 dBc typical @ 5 Watts | | |
| 10 | Input/Output Impedance | 50 Ohms nominal | | |
| 11 | AC Input Power | 300 Watts Maximum | | |
| 12 | AC Input | 110 – 240 VAC, single phase 0 dBm max CW/AM/FM/PM/Pulse Class A | | |
| 13 | RF Input | | | |
| 14 | RF Input Signal Format | | | |
| 15 | Class of Operation | | | |
| <u>Mechanical</u> | | | | |
| 16 | Dimensions | 19" x 5.25" x 21" | | |
| 17 | Weight | 45 Lbs. | | |
| 18 | RF 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 | | |
| 24 | Shock and Vibration | Normal Truck Transport | | |





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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| 1115 | Approved By: | Date: | |



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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





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| 1110 | | | |