

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 5295**

#### 700-6000 MHz 200 WATTS LINEAR POWER RF AMPLIFIER

# Solid State Broadband High Power RF Amplifier

The 5295 is a 200 Watt broadband amplifier that covers the 700-6000 MHz 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 proven with reliability.

Like all OPHIR<sub>RF</sub> amplifiers, the 5295 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

|                      | Parameter Specification @ 25° C |                                  |
|----------------------|---------------------------------|----------------------------------|
| <u>Electrical</u>    |                                 |                                  |
| 1                    | Frequency Range                 | 700-6000 MHz                     |
| 2                    | Power Out at PSAT               | 200 Watts Typical                |
|                      | Power Out at P1dB               | 120 Watts Minimum                |
| 4                    | Small Signal Gain               | +47 dB min                       |
| 5                    | Power Flatness @ Psat           | +/- 3.5 dB                       |
| 6                    | IP <sub>3</sub>                 | +60 dBm typical                  |
| 7                    | Input VSWR                      | 2:1 max                          |
| 8                    | Harmonics                       | -20 dBc typical @ 125 W          |
| 9                    | Spurious Signals                | < -60 dBc typical @ 125 W        |
| 10                   | Input/Output Impedance          | 50 Ohms nominal                  |
| 11                   | AC Input Power                  | 3,800 Watts max                  |
| 12                   | AC Input                        | 180 – 264 VAC, single phase      |
| 13                   | RF Input                        | +8 dBm nominal<br>+10 dBm max    |
| 14                   | RF Input Signal Format          | CW/AM/FM/PM/Pulse                |
| 15                   | Class of Operation              | Α                                |
| <u>Mechanical</u>    |                                 |                                  |
| 16                   | Dimensions: (W x H x D) 5RU     | 19.0" x 8.75" x 26.0"            |
| 17                   | Weight                          | 105 lbs.                         |
| 18                   | Connectors                      | Type-N                           |
| 19                   | Grounding                       | Chassis                          |
| 20                   | Cooling                         | Internal Forced Air              |
| <b>Environmental</b> |                                 |                                  |
| 21                   | Operating Temperature           | 0° C to +50° C                   |
| 22                   | Operating Humidity              | 95% Non-condensing               |
| 23                   | Operating Altitude              | Up to 10,000' Above Sea<br>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

| 08/19 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)
- 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 Front Panel Controller)

### **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

#### 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





