



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 5126**  
**20 - 1000 MHz**  
**120 WATTS**  
**LINEAR POWER RF AMPLIFIER**

**Solid State  
 Broadband High  
 Power RF Amplifier**

The 5126 is a 120 Watt broadband amplifier that covers the 20 – 1000 MHz 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 5126 comes with an extended multiyear warranty.

|                             | <u>Parameter</u>           | <u>Specification @ 25° C</u>  |
|-----------------------------|----------------------------|-------------------------------|
| <b><u>Electrical</u></b>    |                            |                               |
| 1                           | Frequency Range            | 20 – 1000 MHz                 |
| 2                           | Saturated Output Power     | 120 Watts minimum             |
| 3                           | Power Output @ 1dB Comp.   | 70 Watts minimum              |
| 4                           | Small Signal Gain          | +52 dB min                    |
| 5                           | Small Signal Gain Flatness | ± 2.0 dB max                  |
| 6                           | IP <sub>3</sub>            | +55 dBm typical               |
| 7                           | Input VSWR                 | 2:1 max                       |
| 8                           | Harmonics                  | -20 dBc typical @ 70 Watts    |
| 9                           | Spurious Signals           | < -60 dBc typical @ 70 Watts  |
| 10                          | Input/Output Impedance     | 50 Ohms nominal               |
| 11                          | AC Input Power             | 1,500 Watts max               |
| 12                          | AC Input                   | 100 – 240 VAC, single phase   |
| 13                          | RF Input                   | 0 dBm max                     |
| 14                          | RF Input Signal Format     | CW/AM/FM/PM/Pulse             |
| 15                          | Class of Operation         | A/AB                          |
| <b><u>Mechanical</u></b>    |                            |                               |
| 16                          | Dimensions                 | 19" x 5.25" x 26"             |
| 17                          | Weight                     | 69 Lbs.                       |
| 18                          | Connectors                 | Type-N                        |
| 19                          | Grounding                  | Chassis                       |
| 20                          | Cooling                    | Internal Forced Air           |
| <b><u>Environmental</u></b> |                            |                               |
| 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)
- ◇ 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 RF 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 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

### **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**

