



5300 Beethoven Street, Los Angeles, CA 90066  
TEL: (310)306-5556 • FAX: (310)577-9887  
WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

## MODEL 5164-005

**0.8 - 4.2 GHz**  
**100 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 5164-005 is a 100 Watt broadband amplifier that covers the 0.8 – 4.2 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.

|                             | Parameter              | Specification @ 25° C         |
|-----------------------------|------------------------|-------------------------------|
| <b><u>Electrical</u></b>    |                        |                               |
| 1                           | Frequency Range        | 0.8 – 4.2 GHz                 |
| 2                           | Saturated Output Power | 100 Watts min                 |
| 3                           | P-1dB                  | 70 Watts min                  |
| 4                           | Small Signal Gain      | +51 dB min                    |
| 5                           | Power Flatness         | +/- 2.0 dB max with no ALC    |
| 6                           | IP <sub>3</sub>        | +56 dBm typical               |
| 7                           | Input VSWR             | 2:1 max                       |
| 8                           | Harmonics              | -20 dBc typical               |
| 9                           | Spurious Signals       | < -60 dBc                     |
| 10                          | Input/Output Impedance | 50 Ohms nominal               |
| 11                          | AC Input Power         | 700 Watts max                 |
| 12                          | AC Input               | 100 – 240 VAC, single phase   |
| 13                          | RF Input               | +10 dBm max                   |
| 14                          | RF Input Signal Format | CW/AM/FM/PM/Pulse             |
| 15                          | Class of Operation     | A                             |
| <b><u>Mechanical</u></b>    |                        |                               |
| 16                          | Dimensions             | 19" x 5.2" x 20"              |
| 17                          | Weight                 | 48 lb. max                    |
| 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

### CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage
- ◇ VSWR protection

### CIRCUIT INDICATIONS

- ◇ Forward Power
- ◇ Reflected power
- ◇ VSWR Fault
- ◇ Temp Fault
- ◇ Gain Setting (VVA) percentage

### CIRCUIT CONTROL

- ◇ Standby (amplifier disable)
- ◇ Gain/power setting with 25dB range
- ◇ VSWR protection Reset

### ORDERING MODELS

- ◇ RE - Rear Panel Connectors with RS232, ETHERNET & IEEE-488
- ◇ FE - Front Panel Connectors with RS232, ETHERNET & IEEE-488