

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 5063**

1.0 - 2.0 GHz 200 WATTS LINEAR POWER RF AMPLIFIER

# Solid State Broadband High Power RF Amplifier

The 5063 is a 200 Watt broadband amplifier that covers the 1.0 – 2.0 GHz 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 5063 comes with an extended multiyear warranty.

|                      | <u>Parameter</u>           | Specification @ 25°C          |
|----------------------|----------------------------|-------------------------------|
| <u>Electrical</u>    |                            |                               |
| 1                    | Frequency Range            | 1.0 – 2.0 GHz                 |
| 2                    | Saturated Output Power     | 200 Watts typical             |
| 3                    | Power Output @ 1dB Comp.   | 150 Watts min                 |
| 4                    | Small Signal Gain          | +54 dB min                    |
| 5                    | Small Signal Gain Flatness | ± 2.0 dB max                  |
| 6                    | IP <sub>3</sub>            | +62 dBm typical               |
| 7                    | Input VSWR                 | 2:1 max                       |
| 8                    | Harmonics                  | -20 dBc typical @ 150 Watts   |
| 9                    | Spurious Signals           | <-60 dBc                      |
| 10                   | Input/Output Impedance     | 50 Ohms nominal               |
| 11                   | AC Input Power             | 1500 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/AB                          |
| <u>Mechanical</u>    |                            |                               |
| 16                   | Dimensions                 | 19" x 8.75" x 20"             |
| 17                   | Weight                     | 80 lb. max                    |
| 18                   | 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        |



**FE MODEL SHOWN** 

Specifications subject to change without notice

#### 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

06/14 Approved By: Date:



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#### FRONT PANEL CONTROLLER FEATURES

- ♦ 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 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





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