

5200 Beethoven Street, Los Angeles, CA 90066 TEL: (310)306-5556 • FAX: (310)821-7413 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

### Solid State Broadband High Power RF Amplifier

The 5244 is a 120 Watt broadband amplifier that covers the 0.7 - 3.0 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. Like all OPHIR<sub>RF</sub> amplifiers, the 5244 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
Electrical		
1	Frequency Range	0.7 – 3.0 GHz
2	Saturated Output Power	120 Watts typical
3	Power Output @ 1dB Comp.	80 Watts min
4	Small Signal Gain	+53 dB min
5	Power Gain Flatness	<u>+</u> 1.5 dB max
6	IP <sub>3</sub>	+56 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 80 Watts
9	Spurious Signals	< -60 dBc typical @ 80 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	1,800 Watts max
12	AC Input	100 – 240 VAC, single phase
13	RF Input	+6 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A
<b>Mechanical</b>		
16	Dimensions	19" x 5.25" x 26"
17	Weight	48 lb. max
18	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

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



**FE MODEL SHOWN** 

# **MODEL 5244**

#### 0.7 - 3.0 GHz 120 WATTS LINEAR POWER RF AMPLIFIER

07/13	Approved By:
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0.7 - 3.0 GHz 120 WATTS LINEAR POWER RF AMPLIFIER

## FRONT PANEL CONTROLLER FEATURES

- ◊ Forward Power Monitoring
- ◊ Reflected Power Monitoring
- ◊ Gain Control (Dynamic range of 20 dB)
- ◊ 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 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 CONTROL (WITH FRONT PANEL CONTROLLER)

- Standby (amplifier disable)
- Or 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

## **CIRCUIT PROTECTIONS**

- Or Thermal Overload
- Over Current
- ◊ Over Voltage
- Open or Short VSWR Conditions (With Front Panel Controller)

## **RFPA SYSTEM OPTIONS**

- **O Switched Filter Bank**
- ◊ Input Power Requirements
- Ruggedized Version
- Or Cabinet Requirements
- Outdoor Version
- Sample Ports
- Acking Options
- ◊ Many More!
- **Organization of Consult Factory with Specific Requirements**



