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### **MODEL 5244**

0.7 - 3.0 GHz 120 WATTS LINEAR POWER RF AMPLIFIER

# 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.

	<u>Parameter</u>	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	1,200 Watts max	
12	AC Input	100 – 240 VAC, single phase	
13	RF Input	0 dBm nominal	
14	RF Input Signal Format	CW/AM/FM/PM/Pulse	
15	Class of Operation	A	
<u>Mechanical</u>			
16	Dimensions	19" x 5.25" x 21"	
17	Weight	55 lbs.	
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	

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
- ♦ Rear RF Connector model
- ♦ F Front RF Connector model

05/22 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)
- ♦ 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 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 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 20 dB range
- ♦ VSWR protection Reset
- ALC On/ Off

## CIRCUIT INDICATIONS (WITH FRONT PANEL CONTROLLER)

- 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



05/22	Approved By:	Da	nte: