

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

MODEL 5243

700-3000 MHz 70 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5243 is a 70 Watt broadband amplifier that covers the 700-3000 MHz frequency range. This amplifier utilizes Class A linear power devices that provide an excellent 3rd 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_{RF} amplifiers, the 5243 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	<u>Parameter</u>	Specification @ 25° C		
Electrical				
1	Frequency Range	700-3000 MHz		
2	Saturated Output Power	70 Watts Typical		
3	Power at P1dB	45 Watts Minimum		
4	Small Signal Gain	+49 dB Minimum		
5	Gain Flatness	<u>+</u> 1.5 dB Maximum		
6	IP ₃	+52 dBm typical		
7	Input VSWR	2:1 max		
8	Harmonics	-20 dBc min @ 45 Watts		
9	Spurious Signals	< -60 dBc typical @ 45 Watts		
10	Input/Output Impedance	50 Ohms nominal		
11	AC Input Power	900 Watts Maximum		
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	Class A		
<u>Mechanical</u>				
16	Dimensions	19" x 5.25" x 21"		
17	Weight	40 Lbs.		
18	RF 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



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
- ♦ Reflected Power Monitoring
- ♦ Gain Control (20 dB dynamic range of adjustment)
- ♦ Fault Status
- ♦ Full Protection Of any VSWR Condition, Open or Short.
- ♦ 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)
- ♦ 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

- ♦ 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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