



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 5124**  
**20 - 1000 MHz**  
**20 WATTS**  
**LINEAR POWER RF AMPLIFIER**

## Solid State Broadband High Power RF Amplifier

The 5124 is a 20 Watt broadband amplifier that covers the 20 – 1000 MHz frequency range. This 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 5124 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	<u>Parameter</u>	<u>Specification @ 25° C</u>
<b><u>Electrical</u></b>		
1	Frequency Range	20 – 1000 MHz
2	Saturated Output Power	20 Watts typical
3	Power Output @ 1dB Comp.	10 Watts minimum 13 Watts typical
4	Small Signal Gain	+44 dB min
5	Small Signal Gain Flatness	± 1.5 dB max
6	IP <sub>3</sub>	+47 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 10 Watts
9	Spurious Signals	<-60 dBc typical @ 10 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	350 Watts max
12	AC Input	100 – 240 VAC, single phase
13	RF Input	0 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	AB
<b><u>Mechanical</u></b>		
16	Dimensions	19" x 5.25" x 20"
17	Weight	37 Lbs.
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*



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	<u>Parameter</u>
<b><u>Front Panel Controller</u></b>	<b><u>Front Panel Controller Optional</u></b>
25*	Forward Power Monitoring
26*	Reflected Power Monitoring
27*	Gain Control (25 dB dynamic range of adjustment)
28*	Fault Status
29*	Full Protection Of any VSWR Condition, Open or Short, any Phase.
30*	Remote Control Access via the Ethernet, RS-232, or IEEE-488 Communications ports
31*	Integrated Automatic Leveling Control to allow end-user to maintain output even with variances in temperature, or input RF level
32*	Standby/Enable Control
33*	Front Panel Display for easy viewing of System Status Locally
34*	Keypad buttons for full local control
<b><u>Circuit Protections</u></b>	
35	Thermal Overload
36	Over Current
37	Over Voltage
38*	Open or Short VSWR Conditions
<b><u>Circuit Control</u></b>	
39*	Standby (amplifier disable)
40*	Gain/power setting with 25dB range
41*	VSWR protection Reset
42*	ALC On/ Off
<b><u>Circuit Indications</u></b>	
43*	Forward Power
44*	Reflected power
45*	VSWR Fault
46	Temp Fault
47*	Gain Setting (VVA) percentage

*Specifications subject to change without notice*

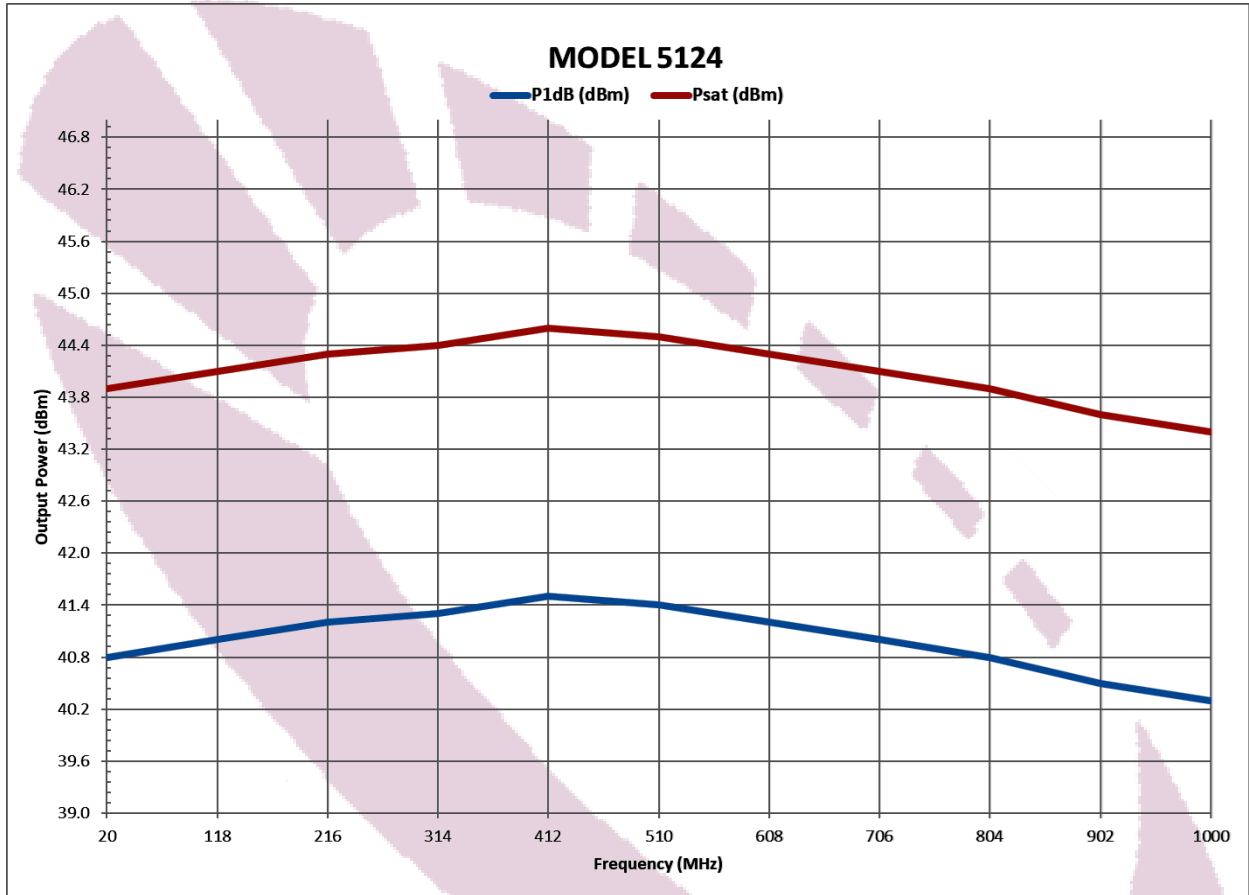
\* With Front Panel Controller Option



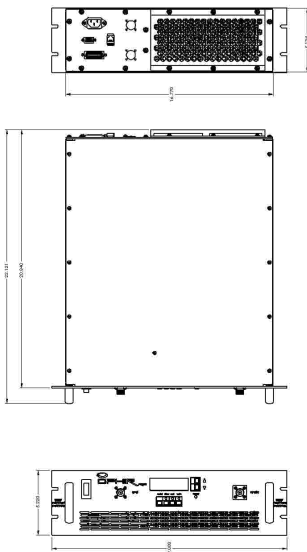


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**FE MODEL SHOWN**

**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