

5300 Beethoven Street, Los Angeles, CA 90066 TEL: (310)306-5556 • FAX: (310)821-7413 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

ъ.

## **MODEL 5174**

1.0 - 3.0 GHz 100 WATTS LINEAR POWER RF AMPLIFIER

## **Solid State Broadband High Power RF Amplifier**

The 5174 is a 100 Watt broadband amplifier that covers the 1.0 - 3.0 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 5174 comes with an extended multiyear warranty.

	<u>Parameter</u>	Specification @ 25° C	
<u>Electrical</u>			
1	Frequency Range	1.0 – 3.0 GHz	
2	Saturated Output Power	100 Watts typical	
3	Power Output @ 1dB Comp.	80 Watts min	
4	Small Signal Gain	+51 dB min	
5	Small Signal Gain Flatness	<u>+</u> 2.0 dB max	
6	IP <sub>3</sub>	+59 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	1200 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 26"	
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	
		Specifications subject to change without notice.	

## **CIRCUIT PROTECTIONS**

- ♦ Thermal Overload
- ♦ Over Current
- ♦ Over Voltage

## **ORDERING MODELS**

- ♦ R - Rear Panel Connectors
- ◊ F - Front Panel Connectors
- ♦ RE R model w/Control Option
- ♦ FE F model w/Control Option
- ♦ RT RE model w/Ethernet Interface
- ♦ FT FE model w/Ethernet Interface

FF Model Shown

Approved By:	Date:		