



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

**MODEL 5205**  
**0.5-3.0 GHz**  
**50 WATTS**  
**LINEAR POWER RF AMPLIFIER**

## Solid State Broadband High Power RF Amplifier

The 5205 is a 50 Watt broadband amplifier that covers the 0.5-3.0 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.

	Parameter	Specification @ 25° C
<b>Electrical</b>		
1	Frequency Range	0.5-3.0 GHz
2	Saturated Output Power	50 Watts Typical
3	Power @ 1dB Compression	24 Watts Minimum
3	Small Signal Gain	+48 dB min
4	Power Flatness	± 2.5 dB max
5	IP <sub>3</sub>	+54 dBm typical
6	Input VSWR	2:1 max
7	Harmonics	-20 dBc typical @ 24 Watts
8	Spurious Signals	< -60 dBc typical @ 24 Watts
9	Input/Output Impedance	50 Ohms nominal
10	AC Input Power	600 Watts max
11	AC Input	100 – 240 VAC, single phase
12	RF Input	10 dBm maximum 0 dBm nominal for Rated Power
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	A/AB
<b>Mechanical</b>		
15	Dimensions	19" x 5.25" x 20"
16	Weight	36 Lbs.
17	Connectors	Type-N
18	Grounding	Chassis
19	Cooling	Internal Forced Air
<b>Environmental</b>		
20	Operating Temperature	0° C to +50° C
21	Operating Humidity	95% Non-condensing
22	Operating Altitude	Up to 10,000' Above Sea Level
23	Shock and Vibration	Normal Truck Transport

### CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage

### CIRCUIT CONTROL w Controller Option

- ◇ Standby (amplifier disable)
- ◇ Gain/power setting with 25dB range
- ◇ VSWR protection Reset
- ◇ ALC On/ Off

### CIRCUIT INDICATIONS w controller option

- ◇ Forward Power
- ◇ Reflected power
- ◇ VSWR Fault
- ◇ Temp Fault
- ◇ Gain Setting (VVA) percentage

### ORDERING MODELS

- ◇ R - Rear Panel Connectors
- ◇ F - Front Panel Connectors
- ◇ RE - R model with Controller Ethernet, IEEE488 and RS232
- ◇ FE - F model with Controller Ethernet, IEEE488 and RS232

Specifications subject to change without notice



FE Model Shown