

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

### **MODEL 5245**

0.7 - 3.0 GHz 250 WATTS LINEAR POWER RF AMPLIFIER

#### Solid State Broadband High Power RF Amplifier

The 5245 is a very high power broadband amplifier that covers the 700 – 3,000 MHz frequency range. This amplifier utilizes Class A linear power devices that provide an excellent  $3^{rd}$  order intercept point, high gain, a wide dynamic range, and an industry leading power performance.

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 5245 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	0.7 – 3.0 GHz
2	Power at P <sub>SAT</sub>	250 Watts typical
3	Power out at 1dB compression	150 Watts minimum
4	Small Signal Gain	+55 dB minimum
5	Power Gain Flatness	<u>+</u> 1.5 dB maximum
6	IP <sub>3</sub>	+50 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 150 W
9	Spurious Signals	< -60 dBc typical @ 150 W
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	2,500 Watts maximum
12	AC Input	180 – 264 VAC, single phase
13	RF Input	0 dBm nominal <b>+10 dBm maximum</b>
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	А
<u>Mechanical</u>		
15	Dimensions (3U)	19" x 5.25" x 21" (F or R option) 19" x 5.25" x 27" (FE or RE option)
16	Weight	63 lbs. (F or R option) 72 lbs. (FE or RE option)
17	RF Connectors	Туре-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

Date:

## O DPHIR RF

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

Specifications subject to change without notice







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#### **FE VERSION 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