



5300 Beethoven Street, Los Angeles, CA 90066  
 TEL: (310)306-5556 • FAX: (310)577-9887  
 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

**MODEL 4141**  
**2.45 GHz**  
**1000 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 4141 is a 1000 Watt microwave amplifier that covers the 2.45 GHz frequency range. This amplifier utilizes Class 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 4141 comes backed by an extended multiyear warranty and Ophir RF's commitment to total customer satisfaction.

	<u>Parameter</u>	<u>Specification @ 25° C</u>
<b><u>Electrical</u></b>		
1	Frequency Range	2.45 GHz ± 5%
2	Power Output P <sub>SAT</sub>	1000 Watts Minimum
3	Power Output P <sub>3dB</sub>	600 Watts Nominal
4	Small Signal Gain	+64 dB Minimum
5	Power Gain Flatness	± 0.25 dB Maximum
6	IP <sub>3</sub>	+56 dBm Minimum
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical
9	Spurious Signals	-60 dBc typical
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	1400 Watts Maximum
12	AC Input	180-240 VAC 1Ø
13	RF Input for Full Power	0 dBm Nominal
14	RF Input Overdrive	+3 dBm Maximum
15	RF Input Signal Format	CW/AM/FM/PM
16	Class of Operation	AB
<b><u>Mechanical</u></b>		
17	Dimensions* (W x H x D)	19" x 8.75" x 26" 5RU
18	Weight*	110 Lbs. Maximum
19	RF Connectors	Type-N RF Input
20	Grounding	Chassis
21	Cooling	Internal Forced Air
<b><u>Environmental</u></b>		
22	Operating Temperature	0° C to +50° C
23	Operating Humidity	95% Non-condensing
24	Operating Altitude	Up to 10,000' Above Sea Level
25	Shock and Vibration	Normal Truck Transport



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<b><u>Front Panel Controller</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



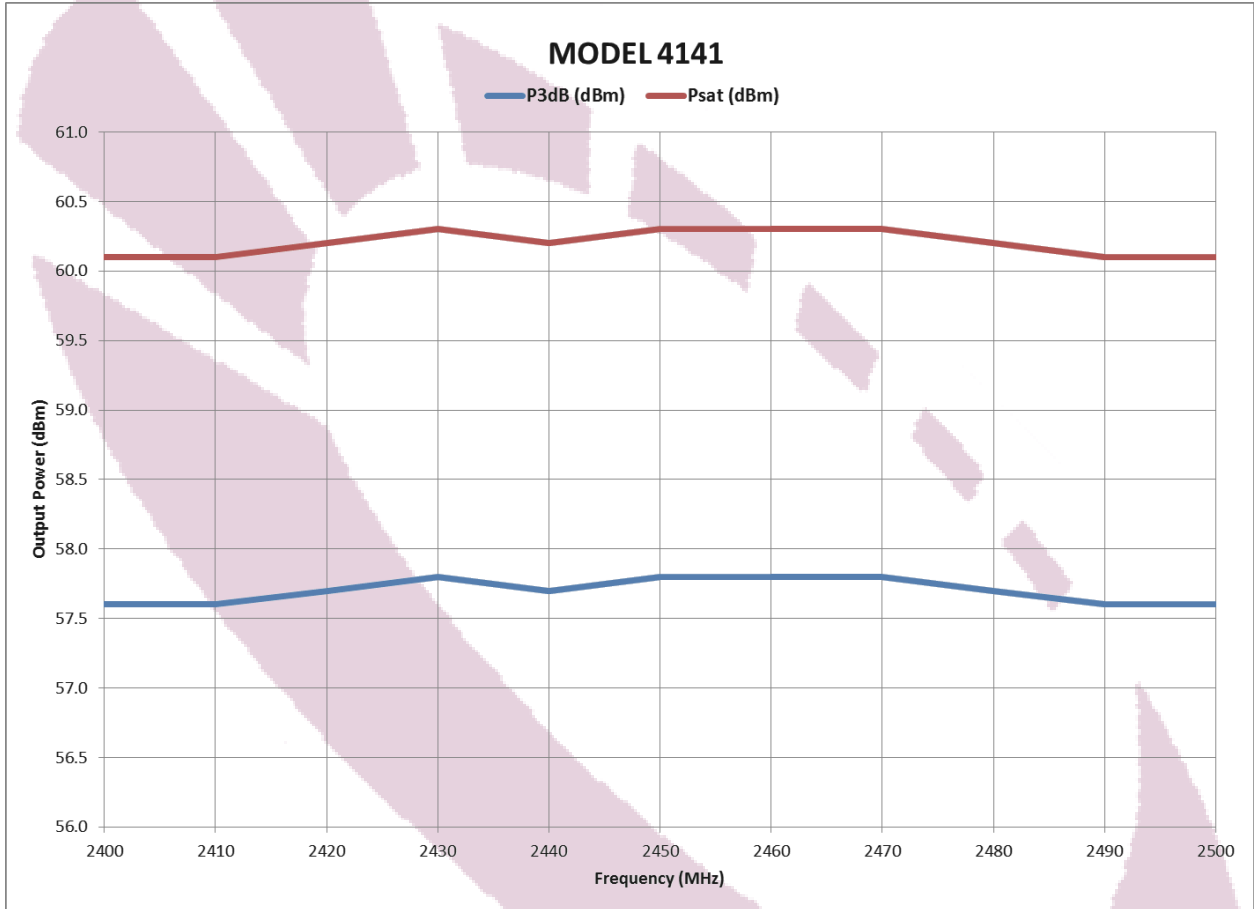
**MADE IN USA**





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Specifications subject to change without notice



**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