



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 4047**

**2-30 MHz**  
**6000 WATTS**  
**RF POWER AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 4047 is a very high power broadband amplifier that covers the 2-30 MHz frequency range. This amplifier utilizes Class A/AB linear power devices that provide an excellent 3<sup>rd</sup> order intercept point, high gain, a wide dynamic range, and an industry leading P1dB 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 4047 comes 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	2-30 MHz Optimized for 7.0-24 MHz
2	Rated Output Power	6000 Watts Nominal
4	Small Signal Gain	+68 dB Minimum
5	Gain Flatness	± 2.0 dB Maximum
6	IP <sub>3</sub>	+78 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-25 dBc min @ 5000 Watts
9	Spurious Signals	< -60 dBc typical @ 5000 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	24000 Watts Maximum
12	AC Input	208 VAC (± 10%) 3Ø Phase
13	RF Input	0 dBm nominal
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	Class A/AB
<b><u>Mechanical</u></b>		
16	Dimensions (H x W x D)	72" x 24" x 36"
17	Weight	750 Lbs. Nominal
18	RF Connectors	Type-N Female Input Type 7/16 Female Output
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



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	<u>Parameter</u>
<b><u>Front Panel Controller</u></b>	
25	Forward Power Monitoring (dBm or Watts)
26	Reflected Power Monitoring (dBm or Watts)
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
<b><u>RF Sample ports</u></b>	
<b>RF Sample ports:</b>	
48	Forward Power (SMA-F)
49	Reflected power (SMA-F)





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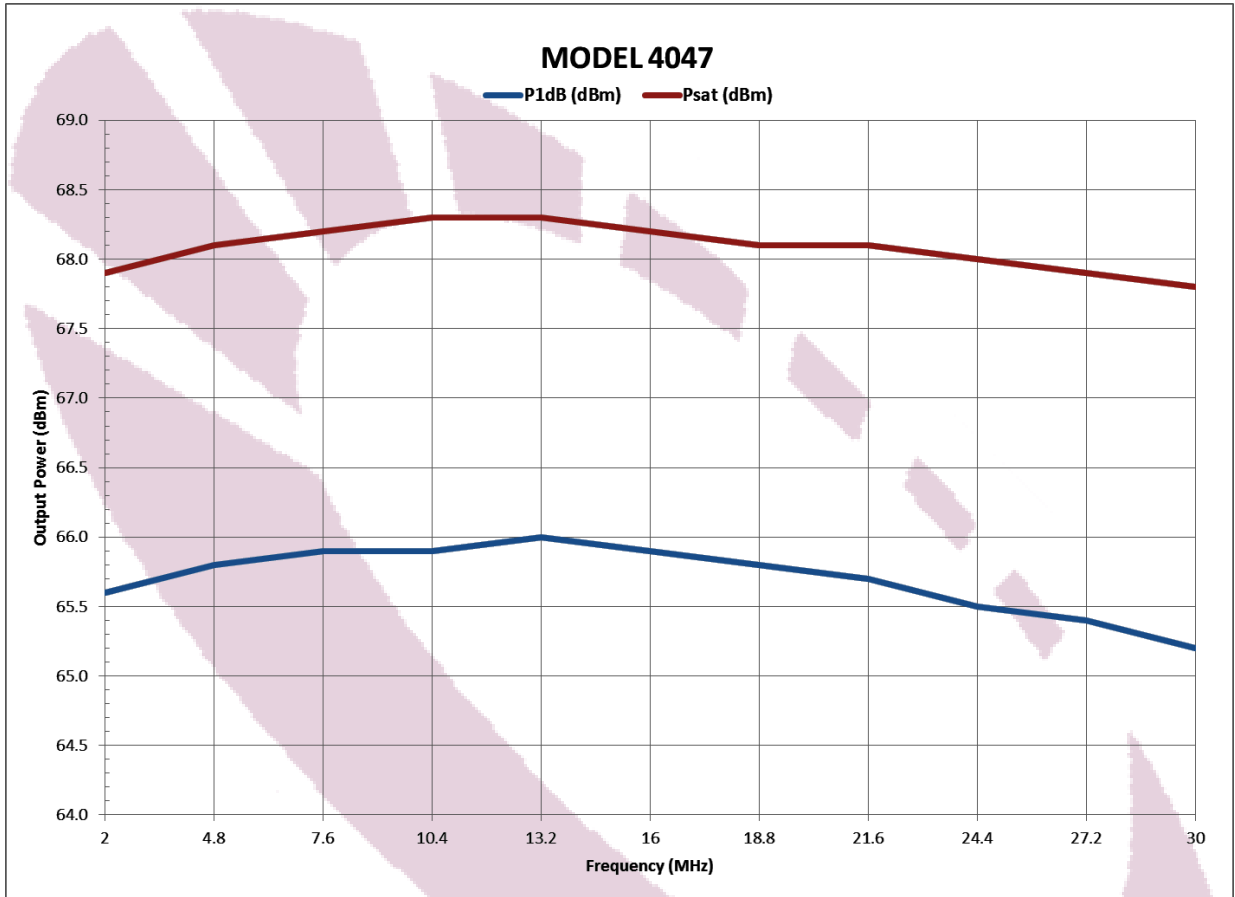
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*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE*



<b>Available Configurations</b>		
◇	RE	Rear Panel RF Connectors, with Front Panel Controller
◇	FE	Front Panel RF Connectors, with Front Panel Controller
<b>Available Options</b>		
◇	Switched filter bank for improved harmonic performance.	
◇	Band Optimization	
◇	Modular design.	
◇	Expandable for higher power	