



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 4147**  
**6.0-18 GHz**  
**200 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 4147 is a 200 Watt Solid State broadband amplifier that covers the 6.0-18 GHz frequency range. This amplifier utilizes Class AB linear power devices that provide low harmonics, high gain, and excellent stability

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 4147 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	6.0-18 GHz
2	Nominal Output Power	6.0-17.0 GHz 200 Watts Nominal 17.0-18.0 GHz 125 Watts Nominal
3	Small Signal Gain	+53 dB Minimum
4	Power Gain Flatness	± 5.0 dB Maximum
5	IP <sub>3</sub>	+62 dBm typical
6	Input VSWR	2:1 max
7	Harmonics	-20dBc Nominal @ 100 Watts
8	Spurious Signals	< -60dBc Nominal @ 100 Watts
9	Input/Output Impedance	50 Ohms nominal
10	AC Input Power	3000 Watts Maximum
11	AC Input	180-240 VAC Single Phase
12	RF Input	0 dBm max
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	Class AB
<b><u>Mechanical</u></b>		
15	Dimensions (5RU)	19" x 8.75" x 26"
16	Weight	125 lb. max
17	Connectors	Type-N
18	Grounding	Chassis
19	Cooling	Internal Forced Air
<b><u>Environmental</u></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

*Specifications subject to change without notice*



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	<u>Parameter</u>
<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

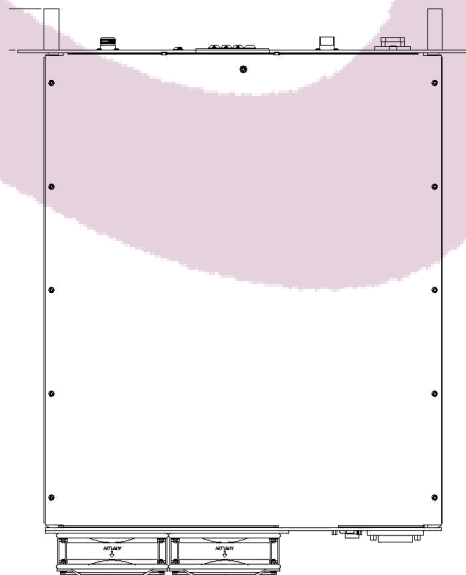
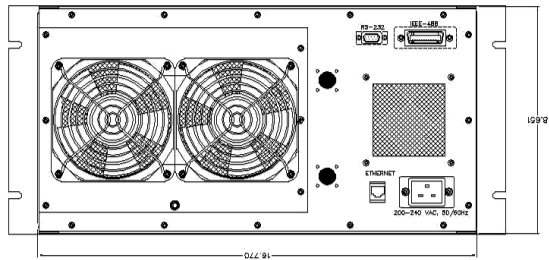
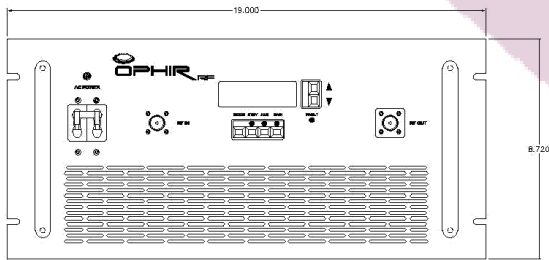
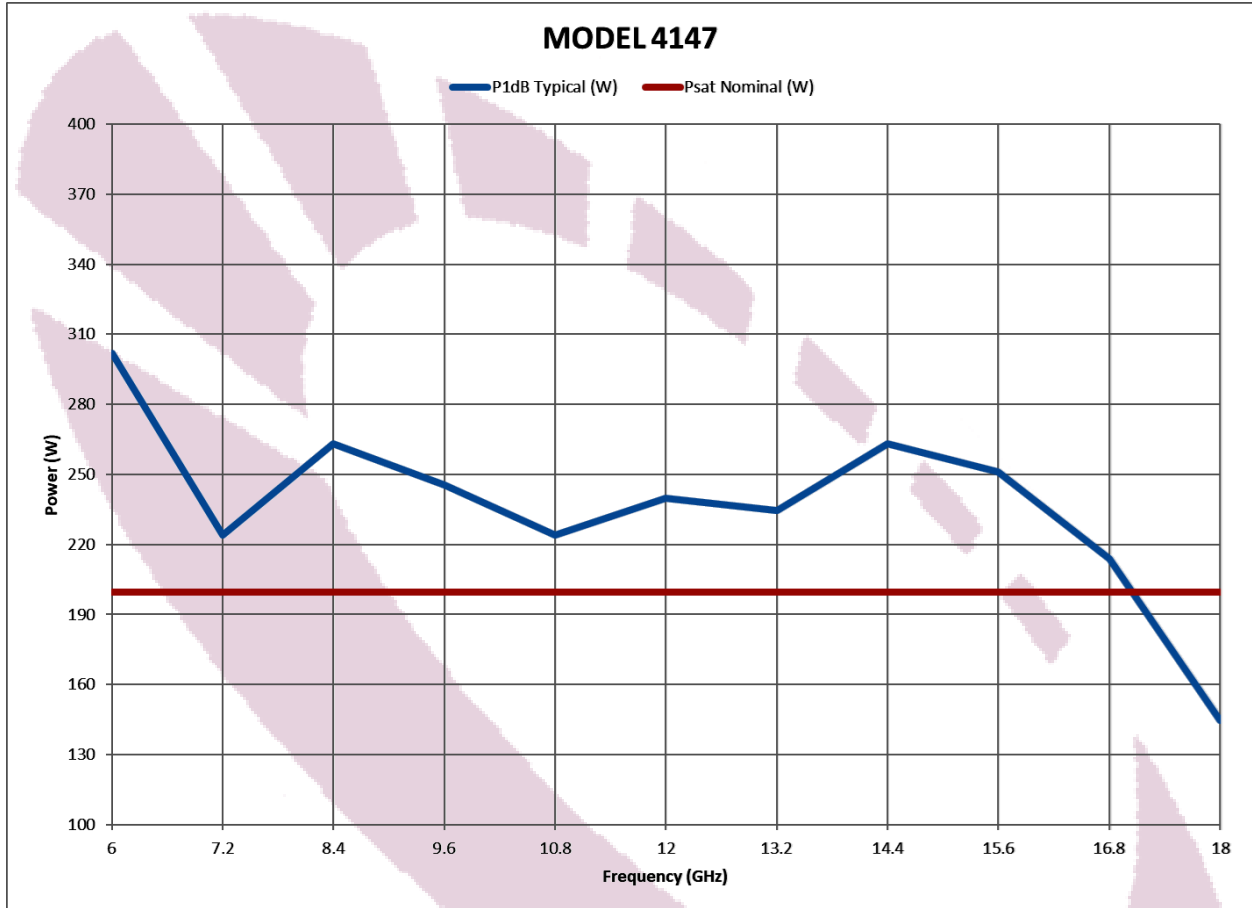


0323 Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



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**ORDERING MODELS**

RE Rear RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232