



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 5029
500-1000 MHz
500 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5029 is a 500 Watt broadband amplifier that covers the 500-1000 MHz frequency range. This amplifier utilizes Class A linear power devices that provide an excellent 3rd 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_{RF} amplifiers, the 5029 comes with an extended multiyear warranty backed by the OPHIR_{RF} commitment to total customer satisfaction.

	<u>Parameter</u>	<u>Specification @ 25° C</u>
<u>Electrical</u>		
1	Frequency Range	500-1000 MHz
2	Saturated Output Power	500 Watts Nominal
3	Power at P1dB	300 Watts Minimum
4	Small Signal Gain	+55 dB Minimum
5	Gain Flatness	± 2.0 dB Maximum
6	IP ₃	+64 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20dBc Minimum @ 300 Watts
9	Spurious Signals	< -60dBc Nominal @ 300 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	3,300 Watts Maximum
12	AC Input	180 – 240 VAC, single phase
13	RF Input	0 dBm nominal +3 dBm Max without damage
14	RF Pulse Rise/Fall Time	≤ 1µs
15	RF Input Signal Format	CW/AM/FM/PM/Pulse
16	Class of Operation	Class A
<u>Mechanical</u>		
17	Dimensions (3RU)	19" x 5.25 x 26"
18	Weight	69 lbs.
19	Connectors	Type-N
20	Grounding	Chassis
21	Cooling	Internal Forced Air
<u>Environmental</u>		
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

Specifications subject to change without notice



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



11/18 Approved By: _____ Date: _____



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FE MODEL 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