



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 5228**  
**80 - 1000 MHz**  
**1000 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 5228 is a very high power broadband amplifier that covers the 80 – 1000 MHz frequency range. This amplifier utilizes Class A 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 5228 comes with an extended multiyear warranty 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	80 – 1000 MHz
2	Power at P <sub>SAT</sub>	1000 Watts minimum
3	Power at P <sub>1dB</sub>	1000 Watts minimum to < 500 MHz 800 Watts minimum > 500 MHz
4	Small Signal Gain	+63 dB Minimum
5	Gain Flatness	± 5.0 dB Maximum
6	IP <sub>3</sub>	+64 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc min @ P <sub>1dB</sub> Compression
9	Spurious Signals	< -60 dBc typical @ P <sub>1dB</sub> Compression
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	8000 Watts Maximum
12	AC Input	208 VAC @ 30 Amps
13	RF Input	0 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	Class A
<b><u>Mechanical</u></b>		
16	Dimensions	31" x 24" x 26"(H x W x D) 79 x 61 x 67 (H x W x D) cm
17	Weight	339 lbs. / 154 Kg
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
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

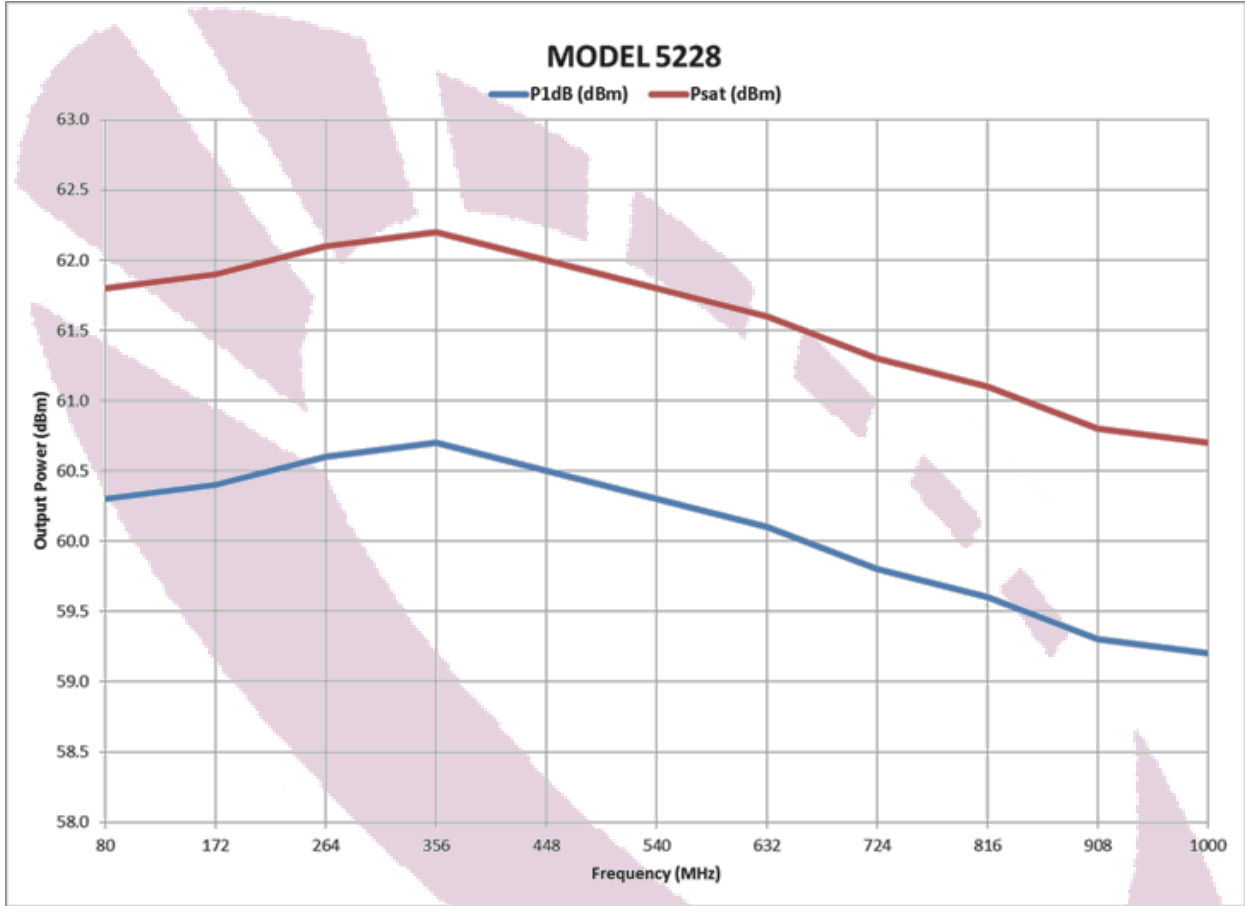
Specifications subject to change without notice





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**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