



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 5227-030

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

### Solid State Broadband High Power RF Amplifier

The 5227-030 is a 500 Watt 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, 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 5227-030 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

Specifications subject to change without notice

	Parameter	Specification @ 25° C
<b>Electrical</b>		
1	Frequency Range	80 – 1000 MHz
2	Saturated Output Power	600 Watts typical at low-end 500 Watts min at high-end
3	Power at P1dB	350 Watts minimum
4	Small Signal Gain	+58 dB minimum
5	Gain Flatness	± 4.5 dB maximum
6	IP <sub>3</sub>	+64 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc Min @ 350 Watts
9	Spurious Signals	< -60 dBc typical @ 350 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	5000 Watts maximum
12	AC Input	180 – 240 VAC, single phase
13	RF Input	0 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	Class A
16	Fwd power sample port	-60 dB +/- 1.0
<b>Mechanical</b>		
	Dimensions (3RU)	19" x 8.75" x 26"
17	Weight	100 lb. max
18	Connectors	Type-N (for RF input, output, and sample port)
19	Grounding	Chassis
20	Cooling	Internal Forced Air
<b>Environmental</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



**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



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 5227-030

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

### FRONT PANEL CONTROLLER FEATURES

- ◇ Forward Power Monitoring
- ◇ Reflected Power Monitoring
- ◇ Gain Control (with 20 dB dynamic range)
- ◇ Fault Status
- ◇ Full Protection Of any VSWR Condition, Open or Short, into any phase angle
- ◇ Remote Control Access via the Ethernet, RS-232, or IEEE-488 communications ports
- ◇ Integrated Automatic Leveling Control to allow end-user to maintain output even with variances in temperature, or input RF level
- ◇ Standby/Enable Control
- ◇ Front Panel Display for easy viewing of System Status Locally
- ◇ Keypad buttons for full local control

### CIRCUIT CONTROL *(WITH FRONT PANEL CONTROLLER)*

- ◇ Standby (amplifier disable)
- ◇ Gain/power setting with 20dB range
- ◇ VSWR protection Reset
- ◇ ALC On/ Off

### CIRCUIT INDICATIONS *(WITH FRONT PANEL CONTROLLER)*

- ◇ Forward Power
- ◇ Reflected power
- ◇ VSWR Fault
- ◇ Temp Fault
- ◇ Gain Setting (VVA) percentage

### CIRCUIT PROTECTIONS

- ◇ Thermal Overload, shutdown at +85°C
- ◇ Over Current
- ◇ Over Voltage
- ◇ Open or Short VSWR Conditions *(With Front Panel Controller)*

### RFPA SYSTEM OPTIONS

- ◇ Switched Filter Bank
- ◇ Input Power Requirements
- ◇ Ruggedized Version
- ◇ Cabinet Requirements
- ◇ Outdoor Version
- ◇ Sample Ports
- ◇ Racking Options
- ◇ Many More!
- ◇ ***Consult Factory with Specific Requirements***