



5200 Beethoven Street, Los Angeles, CA 90066  
 TEL: (310)306-5556 • FAX: (310)821-7413  
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**MODEL 5259**  
**1000-2500 MHz**  
**2000 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 5259 is a very high power broadband amplifier that covers the 1000-2500 MHz frequency range. This amplifier utilizes Class A linear Gallium Nitride (GaN) 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 5259 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	1000-2500 MHz
2	Power at PSAT	2000 Watts Nominal
3	Power at P1dB	1200 Watts Minimum
4	Small Signal Gain	+63 dB Minimum
5	Gain Flatness	± 2.5 dB Maximum
6	IP <sub>3</sub>	+66 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc min @ P1dB Compression
9	Spurious Signals	< -60 dBc typical @ P1dB Compression
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	20,000 Watts Maximum
12	AC Input	208 VAC, three phase 3Ø
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

Specifications subject to change without notice



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## MODEL 5259

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### FRONT PANEL CONTROLLER FEATURES (*Optional*)

- ◇ - Forward Power Monitoring
- ◇ - Reflected Power Monitoring
- ◇ - Gain Control (20 dB dynamic range of adjustment)
- ◇ - 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 PROTECTIONS

- ◇ - Thermal Overload
- ◇ - Over Current
- ◇ - Over Voltage
- ◇ - Open or Short VSWR Conditions (*With Front Panel Controller*)

### 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

### 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**



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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