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## MODEL 5217-001

**700 - 2200 MHz  
50 WATTS  
LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 5217-001 is a 50 Watt broadband amplifier that covers the 700 – 2200 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB 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 5217-001 comes with an extended multiyear warranty.

Specifications subject to change without notice.

	Parameter	Specification @ 25° C
<b>Electrical</b>		
1	Frequency Range	700 – 2200 MHz
2	Saturated Output Power	50 Watts typical
3	Small Signal Gain	+20 dB minimum
4	Gain Flatness @ PsAT	+/-2.0 dB maximum
5	Input VSWR	2:1 max
6	Harmonics	-15 dBc maximum
7	Spurious Signals	-60 dBc maximum
8	Input/Output Impedance	50 Ohms nominal
9	AC Input Power	1000 Watts max
10	AC Input	100 – 240 VAC, single phase
11	RF Input	+27 dBm nominal for full rated power +30 dBm maximum
12	RF Input Signal Format	CW/AM/FM/PM/Pulse
13	Class of Operation	A/AB
<b>Mechanical</b>		
14	Dimensions	19" x 5.25" x 20"
15	Weight	43 lb. max
16	Connectors	Type-N
17	Grounding	Chassis
18	Cooling	Internal Forced Air
<b>Environmental</b>		
19	Operating Temperature	0° C to +50° C
20	Operating Humidity	95% Non-condensing
21	Operating Altitude	Up to 10,000' Above Sea Level
22	Shock and Vibration	Normal Truck Transport

### 5217-001 SPECIAL FEATURES

- ◇ Reduced Gain to accommodate high input power from a transmitter

### 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



**FE MODEL SHOWN**



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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 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
- ◇ 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**

