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 5001

1 - 1000 MHz
200 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5001 is a 200 Watt broadband amplifier that covers the 1 – 1000 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB 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 5001 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
Electrical		
1	Frequency Range	1 – 1000 MHz
2	Saturated Output Power	200 Watts typical
3	Power Output @ 1dB Comp.	100 Watts min
4	Small Signal Gain	+54 dB min
5	Small signal gain flatness **Power flatness (Pin 0 dBm)**	± 2.5 dB max **± 1.5 dB max**
6	IP_3	+56 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 100 Watts
9	Spurious Signals	< -60 dBc typical @ 100 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	3,000 Watts max
12	AC Input	180 – 240 VAC, single phase
13	RF Input	0 dBm nominal for rated power **+3 dBm maximum**
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	AB
Mechanical		
16	Dimensions	19" x 8.75" x 20"
17	Weight	90 Lbs.
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
Environmental		
21	Operating Temperature	0º C to +50º 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.

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

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FRONT PANEL CONTROLLER FEATURES

◊ Forward Power Monitoring (dBm or Watts)
◊ Reflected Power Monitoring (dBm or Watts)
◊ Gain Control (20 dB of 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 20 dB 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***

ANAB ACCREDITED
Certified to ISO 9001:2008
TÜVRheinland Precisely Right.

Made in the U.S.A.

09/14 Approved By: _____ Date: _____