

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 5137A

0.8 - 2.0 GHz 800 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5137A is a 800 Watt broadband amplifier that covers the 0.8 – 2.0 GHz frequency range. This Compact RF 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 this amplifier components, achieves high efficiency operation with proven reliability, Like all OPHIR_{RF} amplifiers, the 5137A comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.



FE MODEL SHOWN

	<u>Parameter</u>	Specification @ 25° C
Electrical		
1	Frequency Range	0.8 – 2.0 GHz
2	Saturated Output Power	800 Watts min.
	Power at P1dB Compression	500 Watts min
4	Small Signal Gain	+61 dB min
5	Power Flatness	+/- 2.5 dB max with no ALC +/- 1.0 dB max with internal leveling
6	IP ₃	+68 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical
9	Spurious Signals	< -60 dBc typical
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	6000 Watts max
12	AC Input	208VAC 3Ø (Three Phase)* *Please specify AC Power requirements with factory
13	RF Input	+10 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A/AB
<u>Mechanical</u>		
16	Dimensions (W x H x D)	22.5" x 31" x 26"
17	Weight	400 lb. max
18	Connectors	Type-N (RF Input) 7/16 DIN (RF Output)
19	Grounding	Chassis
20	Cooling	Internal Forced Air
<u>Environmental</u>		
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

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

0912 Approved by: _____ Date: _____



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FRONT PANEL CONTROLLER FEATURES (Optional)

- ♦ Forward Power Monitoring
- ♦ Reflected Power Monitoring
- ♦ Gain Control (Continuously Variable VVA 20dB)
- ♦ Fault Status
- ♦ Full Protection Of any VSWR Condition, Open or Short, into any Phase Angle
- \Diamond Remote Control Access via the Ethernet, RS-232, or IEEE-488 Communications ports
- ♦ Integrated Automatic Leveling Control to allow enduser to maintain output even with variances in temperature, phase 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)

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CIRCUIT INDICATIONS

(WITH FRONT PANEL CONTROLLER)

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

CIRCUIT CONTROL

(WITH FRONT PANEL CONTROLLER)

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

RFPA SYSTEM OPTIONS

- ♦ Switched Filter Bank
- ♦ Input Power Requirements
- ♦ Ruggedized Version
- ♦ Cabinet Requirements
- ♦ Outdoor Version
- ♦ Sample Ports
- ♦ Racking Options

5137A

-P1dB (W) ----Psat (W) 1500 1400 1300 1200 1100 1000 Power (W 900 800 700 600 500 400 300 200 100 0 800 900 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000

Frequency (MHz)



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