

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 5136-001

1250-1550MHz 500 WATTS LINEAR POWER RF AMPLIFIER

# Solid State Broadband High Power RF Amplifier

The 5136-001 is a 500 Watt broadband amplifier that covers the 1250-1550MHz 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.

	<u>Parameter</u>	Specification @ 25° C	
<u>Electrical</u>			
1	Frequency Range	1250-1550 MHz	
2	Saturated Output Power	500 Watts Minimum	
3	P1dB Output Power	300 Watts Minimum	
4	Small Signal Gain	+58 dB min	
5	Power Flatness @ each band	+/- 1.5 dB max with no ALC +/- 1 dB max with internal leveling	
6	IP <sub>3</sub>	+65 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	3000 Watts max	
12	AC Input	180 – 264 VAC, single phase	
13	RF Input	+10 dBm max	
14	RF Input Signal Format	CW/AM/FM/PM/Pulse	
15	Class of Operation	A/AB	
Mechanical			
16	Dimensions	19" x 14" x 26"	
17	Weight	150 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	

Specifications subject to change without notice

#### **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
<b>♦</b> F	_	Front RF Connector model

0811 Approved by: \_\_\_\_\_\_ Date: \_\_\_\_\_



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### FRONT PANEL CONTROLLER FEATURES

- ♦ 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
- ♦ 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, 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 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)

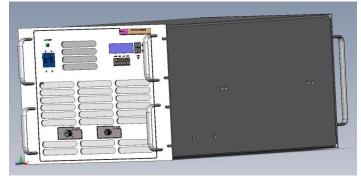
- ♦ Forward Power
- ♦ Reflected power
- ♦ VSWR Fault
- ♦ Temp Fault
- ♦ Gain Setting (VVA) percentage

### **CIRCUIT PROTECTIONS**

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







**FE MODEL SHOWN**