



5200 Beethoven Street, Los Angeles, CA 90066
 TEL: (310)306-5556 • FAX: (310)821-7413
 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 4133
3100-3400 MHz
8000 WATTS
PULSED POWER RF AMPLIFIER

Solid State Pulsed High Power RF Amplifier

The 4133 is a 8000 Watt pulsed amplifier that covers the 3100-3400 MHz frequency range. This amplifier utilizes Class AB linear power devices that provide an excellent peak power performance, high gain, and a wide dynamic range.

Applications might include High Reliability Component Testing, Radar Simulation, Threat Emitters, and many others.

Due to robust engineering and employment of the most advanced Gallium Nitride (GaN) devices and components, this amplifier achieves high efficiency operation with proven reliability. Like all OPHIR_{RF} amplifiers, the 4133 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	<u>Parameter</u>	<u>Specification @ 25° C</u>	<u>Unit</u>
<u>Electrical</u>			
1	Frequency Range	3100-3400	MHz
2	Rated Output Power (Nominal)	8000	Watts
3	Rated Output Power (Minimum)	7500	Watts
4	Small Signal Gain (Minimum)	+69	dB
5	Gain Flatness (Maximum)	± 2.0	dB
6	Input VSWR (Maximum)	2:1	Ratio
7	Harmonics (Nominal)	-20	dBc
8	Spurious Signals (Nominal)	< -60	dBc
9	Input/Output Impedance (Nominal)	50	Ohms
10	AC Input Power (Maximum)	4000	Watts
11	AC Input	180 – 240	VAC
12	RF Input (Maximum)	0	dBm
13	RF Input Signal Format	CW/AM/FM/PM/Pulse	
14	Class of Operation	Class AB	
<u>Pulse</u>			
15	Pulse Width	0.1-100	µSec
16	PRF (Maximum)	50	KHz
17	Duty Cycle (Maximum)	6.0	%
18	Delay (Nominal)	300	nSec
19	Drop (Across 50 uSec)	0.5dB	dB

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



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	<u>Parameter</u>	<u>Specification @ 25° C</u>	<u>Unit</u>
<u>Mechanical</u>			
20	Dimensions (8RU)	19 x 14.0 x 26	Inches (WxHxD)
21	Weight (Maximum)	180	Pounds
22	Connectors	Type-N	
23	Grounding	Chassis	
24	Cooling	Internal Forced Air	
<u>Environmental</u>			
25	Operating Temperature	0° C to +50° C	
26	Operating Humidity	95% Non-Condensing	
27	Operating Altitude	Up to 10,000' Above Sea Level	
28	Shock and Vibration	Normal Truck Transport	

FRONT PANEL CONTROLLER FEATURES

- ◇ - 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.
- ◇ - Remote Control Access via the Ethernet, RS-232, or IEEE-488 Comm. 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

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

CIRCUIT INDICATIONS

- ◇ - Forward Power
- ◇ - Reflected power
- ◇ - VSWR Fault
- ◇ - Temp Fault
- ◇ - Gain Setting (VVA) percentage
- ◇ - Over Duty Cycle
- ◇ - Over Power



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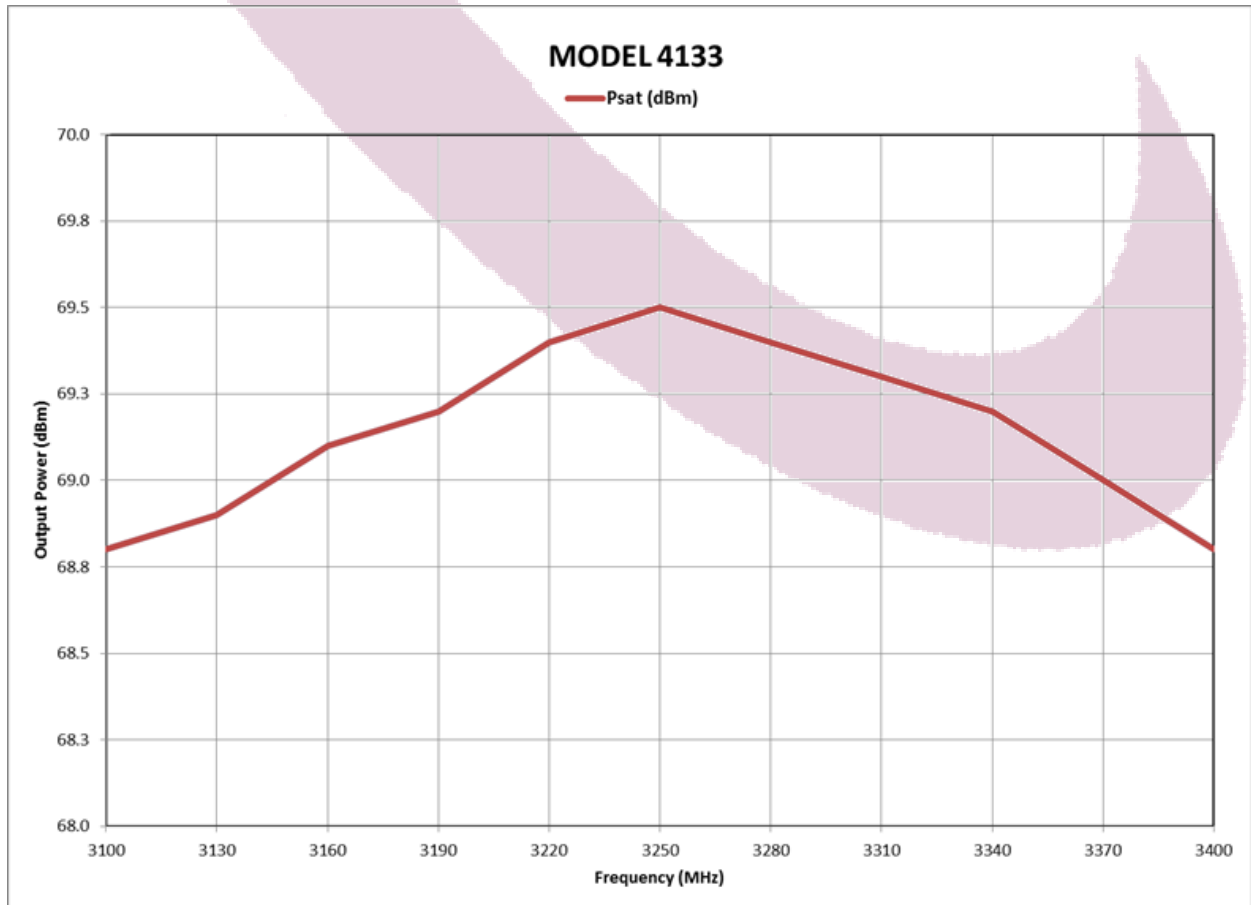
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CIRCUIT PROTECTIONS

- ◇ - Thermal Overload
- ◇ - Over Current
- ◇ - Over Voltage
- ◇ - Open or Short VSWR Conditions
- ◇ - Over Duty Cycle
- ◇ - Excessive Forward Power

RFPA SYSTEM OPTIONS

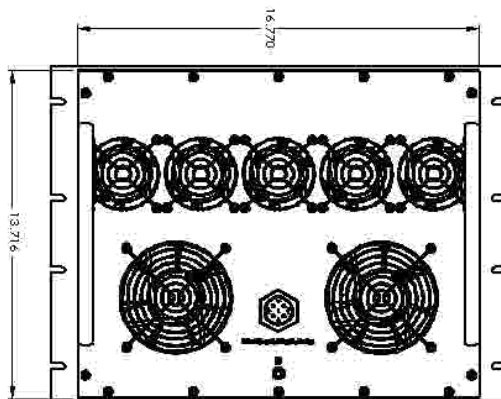
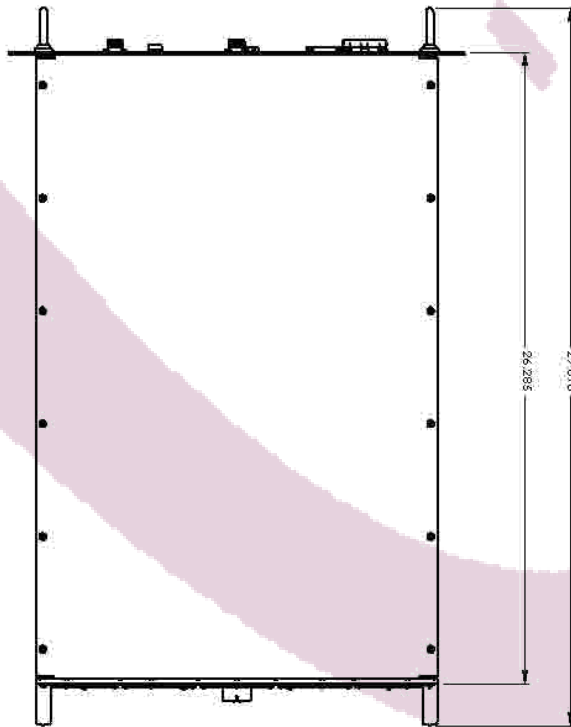
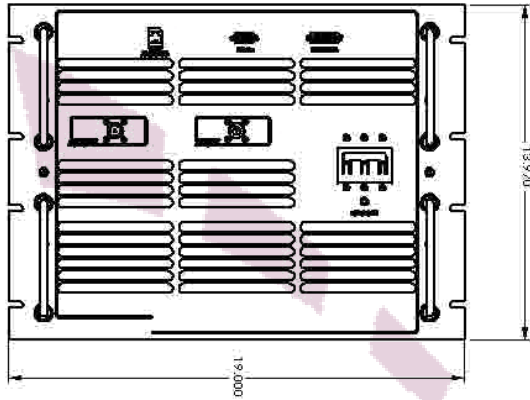
- ◇ - Switched Filter Bank
- ◇ - Input Power Requirements
- ◇ - Ruggedized Version
- ◇ - Cabinet Requirements
- ◇ - Outdoor Version
- ◇ - Sample Ports
- ◇ - Racking Options
- ◇ - Many More!
- ◇ - **Consult Factory with Specific Requirements**





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MADE IN USA

