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MODEL 4031

**50 +/- 1.0 MHz
1000 WATTS
LINEAR POWER RF AMPLIFIER**

Solid State Band-Specific High Power RF Amplifier

The 4031 is a 1000 Watt band-specific amplifier that covers the 50 MHz +/- 1.0 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 4031 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

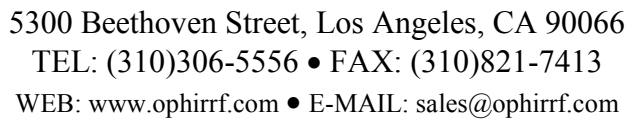
	Parameter	Specification @ 25° C
Electrical		
1	Frequency Range	50 MHz, +/- 1.0MHz
2	Power Output @ 1dB Comp.	1000 Watts min
3	Small Signal Gain	+63 dB min
4	Small Signal Gain Flatness	± 1.0 dB max
5	Noise Figure	10 dB max
6	IP ₃	+66 dBm
7	Input VSWR	2:1 max
8	Harmonics	-15 dBc typical @ 1000 Watts
9	Spurious Signals	-60 dBc typical @ 1000 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	8000 Watts max
12	AC Input	208 ± 10% VAC, single phase
13	Nominal RF Input	0 dBm
14	RF Input Overdrive	+13 dBm max
15	RF Input Signal Format	CW/AM/FM/PM
16	Class of Operation	AB
Mechanical		
17	Dimensions (W x H x D) High Power RF Section Controller/Supply Section	19" x 8.75" x 26" (5RU) 19" x 7.0" x 26" (4RU)
18	Weight*	190 lbs. max
19	RF Connectors	Type-N female
20	Grounding	Chassis
21	Cooling	Internal Forced Air
Environmental		
22	Operating Temperature	0° C to +50° C
23	Operating Humidity	95% Non-condensing
24	Operating Altitude	Up to 10,000' Above Sea Level
25	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
- ◇ F - Front RF Connector model





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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
- ◇ 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 PROTECTIONS

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

CIRCUIT INDICATIONS *(WITH FRONT PANEL CONTROLLER)*

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

RFPA SYSTEM OPTIONS

- ◆ Switched Filter Bank
- ◆ Input Power Requirements
- ◆ Ruggedized Version
- ◆ Cabinet Requirements
- ◆ Outdoor Version
- ◆ Sample Ports
- ◆ Racking Options
- ◆ Many More!

