



5300 Beethoven Street, Los Angeles, CA 90066

TEL: (310)306-5556 • FAX: (310)821-7413

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MODEL 4043

2 - 30 MHz

1000 WATTS

LINEAR POWER RF AMPLIFIER

Solid State Band-specific High Power RF Amplifier

The 4043 is a 1000 Watt band-specific amplifier that covers the 2 – 30 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 4043 comes with an extended multiyear warranty.

	Parameter	Specification @ 25 °C
Electrical		
1	Frequency Range	2 – 30 MHz
2	Saturated Output Power	1000 Watts typical
3	Power Output @ 1dB Comp.	600 Watts min
5	Small Signal Gain	+60 dB min
6	Small Signal Gain Flatness	± 2.0 dB max
7	IP ₃	+64 dBm typical
8	Input VSWR	2:1 max
9	Harmonics	-15 dBc typical @ 600 Watts
10	Spurious Signals	< -60 dBc typical @ 600 Watts
11	Input/Output Impedance	50 Ohms nominal
12	AC Input Power	3000 Watts max
13	AC Input	208 ± 10% VAC, single phase
14	RF Input	0 dBm max.
15	RF Input Signal Format	CW/AM/FM/PM/Pulse
16	Class of Operation	AB
Mechanical		
17	Dimensions	19" x 8.75" x 20"
18	Weight	85 lb. max
19	Connectors	Type-N
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.



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



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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)

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**



Certified to
ISO 9001:2008



Precisely Right.



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