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MODEL 4030
420 - 450 MHz
2000 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 4030 is a 2000 Watt broadband amplifier that covers the 420 – 450 MHz frequency range. This amplifier utilizes Class A 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 4030 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>Electrical</u>		
1	Frequency Range	420 – 450 MHz
2	Saturated Output Power	2000 Watts Typical
3	Power at P1dB	1,000 Watts Minimum
4	Small Signal Gain	+64 dB Minimum
5	Gain Flatness	± 2.0 dB Maximum
6	IP ₃	+65 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc min @ 1,000 Watts
9	Spurious Signals	< -60 dBc typical
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	8,500 Watts Maximum
12	AC Input	240 VAC, three phase 3Ø
13	RF Input	0 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	Class A, AB
<u>Mechanical</u>		
16	Dimensions	31" x 24" x 26" (H x W x D) 79 x 61 x 67 (H x W x D) cm
17	Weight	339 lbs 154 Kg
18	RF Connectors	Type-N Female Input Type 7/16 Female 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



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FRONT PANEL CONTROLLER FEATURES (E Option)

- ◇ Forward Power Monitoring
- ◇ Reflected Power Monitoring
- ◇ Gain Control (Continuously Variable 20 dB dynamic range)
- ◇ 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, 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 20 dB 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**

