



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 5024R-001

425 MHz
500 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5024R-001 is a 500 Watt RF Amplifier which operates at 425MHz. 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 5024R-001 comes with an extended multiyear warranty.

	<u>Parameter</u>	<u>Specification @ 25° C</u>
	<u>Electrical</u>	
1	Frequency Range	425 MHz
2	Saturated Output Power	500 Watts typical
3	IP ₃	+66 dBm typical
4	Input VSWR	2:1 max
5	Input/Output Impedance	50 Ohms nominal
6	AC Input Power	1500 Watts max
7	AC Input	180 – 240 VAC, single phase
8	RF Input Signal Format	CW generated internally
9	Class of Operation	AB
10	Separate RF & DC Gating (the amplifier is turned on)	TTL "High" On, "Low" Off
11	Fast Gating	30dB Isolation
12	Slow Gating	60dB Isolation
13	Fast Gating Speed	20 uSec On/Off
14	Slow Gating Speed	200 uSec On/Off
15		
	<u>Mechanical</u>	
16	Dimensions	19" x 8.75" x 20"
17	Weight	80 lb. max
18	Connector	Type-N
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.

Approved By: _____ Date: _____



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CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage
- ◇ Open/short

CIRCUIT INDICATION

- ◇ Thermal fault

CONTROL FUNCTIONS

- ◇ DC Gating
- ◇ FAST RF Gating

TURN ON SYSTEM

- ◇ Apply "Low" on DC & FAST RF gating input
- ◇ Turn on AC switch
- ◇ Apply "High" on DC & FAST RF gating input

TURN OFF SYSTEM

- ◇ Apply "Low" on DC & FAST RF gating input
- ◇ Turn off AC switch

Approved By: _____ Date: _____