



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 4022-001

2.7 - 2.9 GHz
100 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Band-Specific High Power RF Amplifier

The 4022-001 is a 100 Watt band-specific amplifier that covers the 2.7 – 2.9 GHz 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 4022-001 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
Electrical		
1	Frequency Range	2.7 – 2.9 GHz
2	Saturated Output Power	100 Watts typical
3	Power Output @ 1dB Comp.	80 Watts min
4	Small Signal Gain	+51 dB min
5	Small Signal Gain Flatness	± 1.0 dB max
6	IP ₃	+59 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 80 Watts
9	Spurious Signals	< -60 dBc typical @ 80 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	2000 Watts max
12	AC Input	100 – 240 VAC, single phase
13	RF Input	+10 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A/AB
Mechanical		
16	Dimensions	19" x 8.75" x 24"
17	Weight	90 lb. max
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
Environmental		
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

CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage
- ◇ VSWR protection

CIRCUIT INDICATIONS

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

ORDERING MODELS

- ◇ RE - Rear Panel model with RS232, IEEE, & Ethernet
- ◇ FE - Front Panel model with RS232, IEEE, & Ethernet

CIRCUIT CONTROL

- ◇ Standby (amplifier disable)
- ◇ Gain/power setting with 25dB range
- ◇ VSWR protection Reset

Specifications subject to change without notice.



FE Model Shown