

MODEL 5031
500 - 1000 MHz
1000 WATTS
LINEAR POWER RF AMPLIFIER

**Solid State
 Broadband High
 Power RF Amplifier**

The 5031 is a 1000 Watt broadband amplifier that covers the 500 – 1000 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 5031 comes with an extended multiyear warranty.

	<u>Parameter</u>	<u>Specification @ 25° C</u>
<u>Electrical</u>		
1	Frequency Range	500 – 1000 MHz
2	Saturated Output Power	1000 Watts typical
3	Power Output @ 1dB Comp.	500 Watts min
4	Small Signal Gain	+62 dB min
5	Gain Flatness	± 3.0 dB
6	IP ₃	+64 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 500 Watts
9	Spurious Signals	< -60 dBc typical @ 500 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	8000 Watts max
12	AC Input	186 – 264 VAC, single phase
13	RF Input	0 dB max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A/AB
<u>Mechanical</u>		
16	Dimensions	31" x 24" x 26"
17	Weight	360 lb. max
18	Connectors	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

CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage

CIRCUIT CONTROL

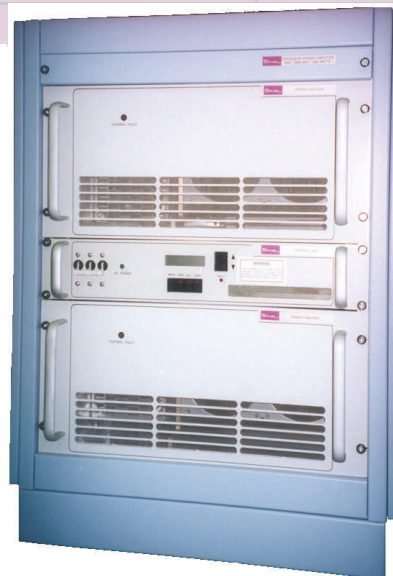
- ◇ Standby (amplifier disable)
- ◇ Gain/power setting with 25dB range
- ◇ VSWR protection Reset
- ◇ ALC On/ Off

CIRCUIT INDICATIONS

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

ORDERING MODELS

- ◇ RE - R model with Ethernet, IEEE488 and RS232
- ◇ FE - F model with Ethernet, IEEE488 and RS232



RE Model Shown

Specifications subject to change without notice