

**MODEL 5051**  
**100 - 500 MHz**  
**300 WATTS**  
**LINEAR POWER RF AMPLIFIER**

**Solid State  
 Broadband High  
 Power RF Amplifier**

The 5051 is a 300 Watt broadband amplifier that covers the 100 – 500 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3<sup>rd</sup> 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<sub>RF</sub> amplifiers, the 5051 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
<b>Electrical</b>		
1	Frequency Range	100 – 500 MHz
2	Saturated Output Power	300 Watts Minimum
3	Power Output @ 1dB Comp.	250 Watts min
4	Small Signal Gain	+55 dB min
5	Gain Flatness	± 2.0 dB
6	IP <sub>3</sub>	+61 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 250 Watts
9	Spurious Signals	< -60 dBc typical @ 250 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	3000 Watts max
12	AC Input	200 – 240 VAC, single phase
13	RF Input	0 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	AB
<b>Mechanical</b>		
16	Dimensions	19" x 8.75" x 20"
17	Weight	80 lb. max
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
<b>Environmental</b>		
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

Specifications subject to change without notice



FE Model Shown

**ORDERING MODELS**

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