

MODEL 5050

10 - 100 MHz
500 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5050 is a 500 Watt broadband amplifier that covers the 10 – 100 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 5050 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	10 – 100 MHz
2	Saturated Output Power	500 Watts Minimum
3	Power Output @ 1dB Comp.	300 Watts min
4	Small Signal Gain	+57 dB min
5	Gain Flatness / with ALC	± 1.5 / ± 0.5 dB max
6	IP ₃	+61 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 300 Watts
9	Spurious Signals	> -60 dBc typical @ 300 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	2000 Watts max
12	AC Input	220 – 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
<u>Mechanical</u>		
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
<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

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