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MODEL 5124-600

20 - 1000 MHz
20 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5124-600 is a 20 Watt broadband amplifier that covers the 20 – 1000 MHz frequency range. This 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 5124-600 comes with an extended multiyear warranty.

CIRCUIT PROTECTIONS

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

CIRCUIT INDICATIONS (w Controller Option)

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

CIRCUIT CONTROL (w Controller Option)

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

	Parameter	Specification @ 25° C
Electrical		
1	Frequency Range	20 – 1000 MHz
2	Saturated Output Power	20 Watts typical
3	Power Output @ 1dB Comp.	13 Watts min
4	Small Signal Gain	+44 dB min
5	Gain Flatness	± 1.5 dB max
6	IP ₃	+47 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 13 Watts
9	Spurious Signals	< -60 dBc typical @ 13 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	160 Watts max
12	AC Input	120 – 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
Mechanical		
16	Dimensions	19" x 5.25" x 20"
17	Weight	43 lb. max
18	Connectors	Rear Panel, 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

ORDERING MODELS

- ◇ R - Rear Panel Connectors
- ◇ F - Front Panel Connectors
- ◇ RE - R model with Ethernet, IEEE488 and RS232
- ◇ FE - F model with Ethernet, IEEE488 and RS232

Specifications subject to change without notice.



RE Model Shown

Special Features (-600 Option)

- ◇ Rear panel Mounted DB-9 Female Connector for External RF Enable / Standby Control
- ◇ Note Pin 5 is Ground, Pin 1 is Control Line
- ◇ Pin 1 Open: RF Standby Condition Gain Approx -30dB
- ◇ Pin 1 Ground: RF Enabled, Amplifier in operating Mode