

## MODEL 5164-001

0.8 - 4.2 GHz

100 WATTS

LINEAR POWER RF AMPLIFIER

### Solid State Broadband High Power RF Amplifier

The 5164-001 is a 100 Watt broadband amplifier that covers the 0.8 – 4.2 GHz 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 5164-001 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
<b>Electrical</b>		
1	Frequency Range	0.8 – 4.2 GHz
2	Saturated Output Power	100 Watts Minimum
3	Small Signal Gain	+51 dB min
4	Small Signal Gain Flatness	± 2.5 dB max
5	IP <sub>3</sub>	+56 dBm typical
6	Input VSWR	2:1 max
7	Harmonics	-20 dBc typical
8	Spurious Signals	< -60 dBc typical
9	Input/Output Impedance	50 Ohms nominal
10	AC Input Power	1200 Watts max
11	AC Input	100 – 240 VAC, single phase
12	RF Input	+10 dBm max
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	A/AB
<b>Mechanical</b>		
15	Dimensions	19" x 8.75" x 26"
16	Weight	80 lb. max
17	Connectors	Type-N
18	Grounding	Chassis
19	Cooling	Internal Forced Air
<b>Environmental</b>		
20	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