

## MODEL 5164-002

**0.8 - 4.2 GHz**  
**120 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 5164-002 is a 120 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 5164-002 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
<b><u>Electrical</u></b>		
1	Frequency Range	0.8 – 4.2 GHz
2	Saturated Output Power	120 Watts Minimum.
3	Power Output @ 1dB Comp.	80 Watts Minimum
4	Small Signal Gain	+52 dB min
5	Small Signal Gain Flatness	± 2.5 dB max
6	IP <sub>3</sub>	+56 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 80 Watts
9	Spurious Signals	< -60 dBc typical @ 80 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	1200 Watts max
12	AC Input	100 – 240 VAC, single phase
13	RF Input	+10 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A/AB
<b><u>Mechanical</u></b>		
16	Dimensions	19" x 7.0" x 26"
17	Weight	80 lb. max
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
<b><u>Environmental</u></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