



5300 Beethoven Street, Los Angeles, CA 90066  
 TEL: (310)306-5556 • FAX: (310)577-9887  
 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

## MODEL 9001RE-001

**1.35 - 1.85 GHz  
 100 WATTS**

### **Solid State Broadband High Power RF Amplifier**

The 9001-001 is a 100 Watt broadband amplifier that covers the 1.35 – 1.85 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 9001-001 comes with an extended

	Parameter	Specification @ 25° C
<b><u>Electrical</u></b>		
1	Frequency Range	1.35 – 1.85 GHz
2	Saturated Output Power	100 Watts typical
3	Power Output @ 1dB Comp.	80 Watts min
4	Small Signal Gain	+17 dB nominal
5	VVA Dynamic Range	10 dB nominal
6	Small Signal Gain Flatness	+ 1.0 dB max
7	IP <sub>3</sub>	+59 dBm typical
8	Input VSWR	2:1 max
9	Harmonics	-40 dBc typical @ 80 Watts
10	Spurious Signals	> -60 dBc typical @ 80 Watts
11	Input/Output Impedance	50 Ohms nominal
12	AC Input Power	800 Watts max
13	AC Input	100 – 240 VAC, single phase
14	RF Input	+36 – 40 dBm max
15	RF Input Signal Format	CW/AM/FM/PM/Pulse
16	Class of Operation	A/AB
<b><u>Mechanical</u></b>		
17	Dimensions	19" x 5.25" x 20"
18	Weight	48 lb. max
19	Connectors	Type-N
20	Grounding	Chassis
21	Cooling	Internal Forced Air
<b><u>Environmental</u></b>		
22	Operating Temperature	0° C to +50° C
23	Operating Humidity	95% Non-condensing
24	Operating Altitude	Up to 10,000' Above Sea Level
25	Shock and Vibration	400 G Pk. Shock

Specifications subject to change without notice.

### **AMPLIFIER FEATURES**

- ◇ Thermal Overload Protection
- ◇ Infinite Load VSWR
- ◇ Quiet Mode (40 dB Isolation)  
 On – TTL High, Off – TTL Low  
 Via Rear panel, Male DB-9 connector
- ◇ RF Sampling Port (30 dB)  
 Front Panel, Type-N connector
- ◇ Internal Safety Interlock
- ◇ Ruggedized for Shock and Vibration

### **ORDERING MODEL**

- ◇ RE - Rear connectors w/Control Option

