

**MODEL 5303132**  
**500-2500 MHz**  
**100 WATTS**  
**LINEAR POWER RF AMPLIFIER**

**Solid State  
 Broadband High  
 Power RF Amplifier**

The 5303132 is a 100 Watt broadband amplifier that covers the 500-2500 MHz 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 5303132 comes with an extended multiyear warranty.



**Shown with Optional Heatsink and Fans**

	<u>Parameter</u>	<u>Specification @ 25° C</u>
<b><u>Electrical</u></b>		
1	Frequency Range	500-2500 MHz
2	Output Power @ PSAT	100 Watts typical 90 Watts minimum
3	Small Signal Gain	+45 dB minimum
4	Gain Flatness @ PSAT	+/-2.0 dB maximum +/-1.5 dB typical
	Input VSWR	2:1 max
6	Harmonics	-20 dBc typical -15 dBc maximum
7	Spurious Signals	-60 dBc maximum -70 dB typical
8	Input/Output Impedance	50 Ohms nominal
10	Efficiency (PAE)	25% minimum 30% typical
11	Switching Time (Blanking)	5µs maximum
	DC Input	30Vdc nominal
12	RF Input	+10 dBm max +7 dBm nominal full rated power
13	DC Power Consumption	500 W max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A/AB
<b><u>Mechanical</u></b>		
16	Dimensions	Length 180mm Width 105mm Height <30mm
17	Weight	< 1.0Kg
18	Connectors	SMA female
19	Grounding	Chassis
20	Cooling	Adequate Heatsink Required
<b><u>Environmental</u></b>		
21	Baseplate Temperature	-20° C to +85° C Shutdown over 85° C Recovery @ 60° C
22	Operating Humidity	95% Non-condensing
23	Operating Altitude	Up to 10,000' Above Sea Level
24	Shock and Vibration	MIL-STD-810F (Method 516.5)

**DC and Interface Connector Pin Description**

- ◇ Pin 1 VDD +30VDC
- ◇ Pin 2 VDD +30VDC
- ◇ Pin 3 Ground
- ◇ Pin 4 N/C
- ◇ Pin 5 Current Monitor
- ◇ Pin 6 N/C
- ◇ Pin 7 N/C
- ◇ Pin 8 N/C
- ◇ Pin 9 VDD +30VDC
- ◇ Pin 10 Ground
- ◇ Pin 11 Ground
- ◇ Pin 12 Blanking (On/Off)  
On = 3-5 Vdc; Off = <0.5 Vdc
- ◇ Pin 13 Ground