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**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.

### DC and Interface Connector Pin Description

- ◇ Pin 1 VSWR ALARM
  - Normal TTL Low
  - Alarm TTL High
- ◇ Pin 2 Current Monitor
- ◇ Pin 3 Temperature Monitor
- ◇ Pin 4 Mute (On/Off Switching)
- ◇ Pin 5 VDD +30 VDC
- ◇ Pin 6 VDD +30VDC
- ◇ Pin 7 VDD +30VDC
- ◇ Pin 8 Ground
- ◇ Pin 9 Ground
- ◇ Pin 10 Ground

	<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 minimum 125 Watts typical
3	Power Gain @ 50dBm	+33 dB minimum +36 dB maximum
4	Gain Flatness @ PsAT	+/-2.0 dB maximum +/-1.5 dB typical
	Gain Variation	+/-2.0 dB Maximum
6	Input VSWR	2:1 max
7	Harmonics	-20 dBc typical -15 dBc maximum
8	Spurious Signals	-60 dBc maximum -80 dB typical
10	Input/Output Impedance	50 Ohms nominal
11	Efficiency (PAE)	25% minimum 35% typical
	Switching Time (Blanking) Enable TTL Low	5uSec maximum
12	DC Input	30VDC nominal
13	RF Input	+22 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	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)