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MODEL 5900796
20 - 500 MHz
100 WATTS
LINEAR POWER RF AMPLIFIER

**Solid State
 Broadband High
 Power RF Amplifier**

The 5900796 is a 100 Watt broadband amplifier that covers the 20 – 500 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3rd 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_{RF} amplifiers, the 5900796 comes with an extended multiyear warranty.

| | Parameter | Specification @ 25° C |
|----------------------|--------------------------|--|
| Electrical | | |
| 1 | Frequency Range | 20 – 500 MHz |
| 2 | Saturated Output Power | 100 Watts typical |
| 3 | Power Output @ 1dB Comp. | 60 Watts min |
| 4 | Small Signal Gain | +52 dB min |
| 5 | Gain Flatness | +/- 1.5dB max @ small signal +/- 1dB typical @ power |
| 6 | IP ₃ | +54 dBm typical |
| 7 | Input VSWR | 2:1 max |
| 8 | Harmonics | -15 dBc minimum @ 60 Watts -20 dBc typical @ 60 Watts |
| 9 | Spurious Signals | < -60 dBc typical @ 60 Watts |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | DC Input Current | 12 Amps max 1 Amp max @ blanked |
| 12 | DC Input | 28—29 Vdc nominal |
| 13 | RF Input | 0 dBm max |
| 14 | Blanking - Definition | On = 5.0 +/- 0.1 Vdc Off = <0.5 Vdc |
| 15 | Blanking Speed | ≤ 100µs |
| Mechanical | | |
| 16 | Dimensions | 8.6" x 3.7" x 5.2" |
| 17 | Weight | 5 Lbs. |
| 18 | Connectors | SMA female |
| 19 | Grounding | Chassis |
| 20 | Cooling | Adequate Heatsink Included Proper airflow required |
| Environmental | | |
| 21 | Baseplate 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 |

Specifications subject to change without notice.

