

**MODEL 5800828-001**  
**700-4200 MHz**  
**60 WATTS**  
**LINEAR POWER RF AMPLIFIER**

## Solid State Broadband High Power RF Amplifier

The 5800828-001 is a 60 Watt broadband, full gain amplifier that covers the 700-4200 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 5800828-001 comes with an extended multiyear warranty.

Specifications subject to change without notice

### Optional Features

- ◇ Heatsink with Fans
- ◇ Available as 19" Rack Mount Unit
- ◇ Many Other options Available
- ◇ Consult Factory for other options
- ◇ Includes Driver Module

### Similar Amplifier Assembly



	<u>Parameter</u>	<u>Specification @ 25° C</u>
<b><u>Electrical</u></b>		
1	Frequency Range	700-4200 MHz
2	Output Power CW (P <sub>SAT</sub> )	60 Watts Typical
3	Output Power (P <sub>1dB</sub> )	40 Watts Minimum
4	Small Signal Gain	49 dB Minimum
5	Gain Flatness	± 3.0 dB Maximum
6	IP <sub>3</sub>	+56 dBm Typical
7	Input VSWR	2:1 Maximum
8	Harmonics	-20 dBc typical @ 45 W
9	Spurious Signals	< -60 dBc Maximum @ 45 W
10	Noise Figure	≤ 25 dB
11	Input/Output Impedance	50 Ohms nominal
12	DC Input (Terminal block)	24 Vdc nominal @ 25.0 Amps for full rated Power 12 Vdc nominal @ 8.0 Amps for full rated Power On/Off feature: <0.5 Vdc = off; 3-5 Vdc = on
13	On/Off (Terminal Block)	<0.5 Vdc = off; 3-5 Vdc = on
14	Blanking on 5800828, Power Module feed-thru	Open or <0.5 Vdc = blanked (off); 3-5 Vdc = un-blanked (on)
15	RF Input	0 dBm Nominal
16	RF Input Signal Format	CW/AM/FM/PM/Pulse
17	Class of Operation	A
<b><u>Mechanical</u></b>		
20	Dimensions L x W x H	17.3" x 10.0" x 4.1" (Includes heatsink & fans)
21	Weight	26.0 lbs.
22	Connectors	SMA female
23	Grounding	Chassis
24	Cooling	Adequate airflow required
<b><u>Environmental</u></b>		
25	Baseplate Temperature	0° C to +50° C
26	Operating Humidity	95% Non-condensing
27	Operating Altitude	Up to 30,000' Above Sea Level
28	Shock and Vibration	MIL-STD-810F (Method 516.5)

### On/off vs. Blanking Feature:

- ◇ On/off controls the drain voltages, >30 dB RF isolation, <0.5s speed
- ◇ Blanking controls gate voltages, >15 dB RF isolation, <250µs speed