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MODEL 5038AR-900

0.8 - 2.0 GHz
100 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5038AR-900 is a 100 Watt broadband amplifier that covers the 0.8 – 2.0 GHz 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 5038AR-900 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
Electrical		
1	Frequency Range	0.8 – 2.0 GHz
2	Saturated Output Power	100 Watts typical
3	Power Output @ 1dB Comp.	80 Watts min
4	Small Signal Gain	+51 dB min
5	Small Signal Gain Flatness	± 2.5 dB max
6	IP ₃	+59 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 80 Watts
9	Spurious Signals	< -60 dBc typical @ 80 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	1000 Watts max
12	AC Input	100 – 240 VAC, single phase
13	RF Input	+10 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	A/AB
Mechanical		
16	Dimensions	19" x 7.0" x 20"
17	Weight	47 Lbs.
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
Environmental		
21	Operating 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.

CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage

ORDERING MODELS

- ◇ R - Rear Panel Connectors

FEATURES

- ◇ Customer Specific Front Panel
- ◇ Rear Panel Mounted DB9-Female for External RF Enable / Standby Control
NOTE: Pin 5 is GND, Pin 1 is the Control Line.
 - IF Pin 1: OPEN - RF Standby Condition (Nominal Gain - 30dB min.)
 - IF Pin 1: GND- RF Enabled (Amplifier in Normal Operation) (< 100mA to Activate)



RE Model Shown