

High Power Amplifier, Solid State, Broadband 1000-3000MHz, 50dB Gain, N Female Connectors, 100 Watts

RAMP-1000-3000M-50d-Nf-100W-e7

This amplifier utilizes high power GaAsFET devices that provide wide frequency response and dynamic range, high gain, low distortions and excellent linearity. Employing advanced broadband RF matching networks and combining techniques, EMI/RFI filters and all qualified components achieve exceptional performance and high efficiency. The system includes a universal voltage single phase power supply and a built in forced air-cooling system.



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| <ul style="list-style-type: none"> • Solid State Linear Design • Instantaneous Broadband • Compact and lightweight • Standard front panel manual gain adjust | <ul style="list-style-type: none"> • Suitable for most modulation types • 50 ohm input/output impedance • High reliability and ruggedness • ISO9001 Quality Assurance Program |
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ELECTRICAL SPECIFICATIONS @ 120 VAC, 25°C, 50 Ω System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	1000		3000	MHz
Output Power CW	P _{SAT}	100			Watt
Output Power @ 1 dB Gain Compression Point	P _{1dB}	80			Watt
Power Gain @ 1 dB Gain Compression Point	G _{1dB}	50			dB
Input Power for Nominal Pout	P _{IN}		0		dBm
Small Signal Gain Flatness	ΔG			±2.0	dB
Gain Adjustment Range	FGA	20	25		dB
Input Return Loss	S ₁₁			-10	dB
Noise Figure @ max gain	NF		7	10	dB
Third Order Intercept Point	IP3		+59		dBm
Harmonics @ 1 dB Gain Compression Point	H		-20		dBc
Spurious Signals	Spur		-70	-60	dBc
Operating Voltage (single phase)	VAC	100		240	Volt
AC Power Consumption	P _D		-	1400	Watt

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ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	Tc	0		+50	°C
Non-operating Temperature	Tstg	-40		+85	°C
Relative humidity (non-condensing)	RH			95	%
Altitude (MIL-STD-810F Method 500.4)	ALT	10,000		30,000	Feet
Shock / Vibration (MIL-STD-810F Method 516.5)	SH / VI		Airborne		

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	19 x 8.75 x 22	Inch	Max
Weight	80	lb.	Max
RF Connectors Input/Output	Type-N female		
Cooling	Built in internal forced air cooling system		

PROTECTIONS

Input Overdrive	+6 dBm		Max
Load VSWR @ rated P1 dB Gain Compression Point	∞ @ any angle & amplitude		Nom
Thermal Overload	85°C shutdown		Max

SELECTED AVAILABLE OPTIONS

Option	Number	Description	Price
FGA	061	Front panel 10 turns manual gain adjustment.	Standard
LCD	062	Touchscreen Digital Display, including Fwd/Rev Power indication (dB or Watt scale), Gain Adjustment, ALC Fast/Slow, On/Off, Standby mode, Fault indication, Rear panel HPIB IEEE-488.2 or Full Duplex RS232 remote interface. Note: Output Power is lowered by 0.5 - 0.75 dB with this option.	Call
FCN	051	Front Panel Type-N female	N/C
RCN	052	Rear Panel Type-N female	N/C

Available Option Packages: 15, 16, 17, 18

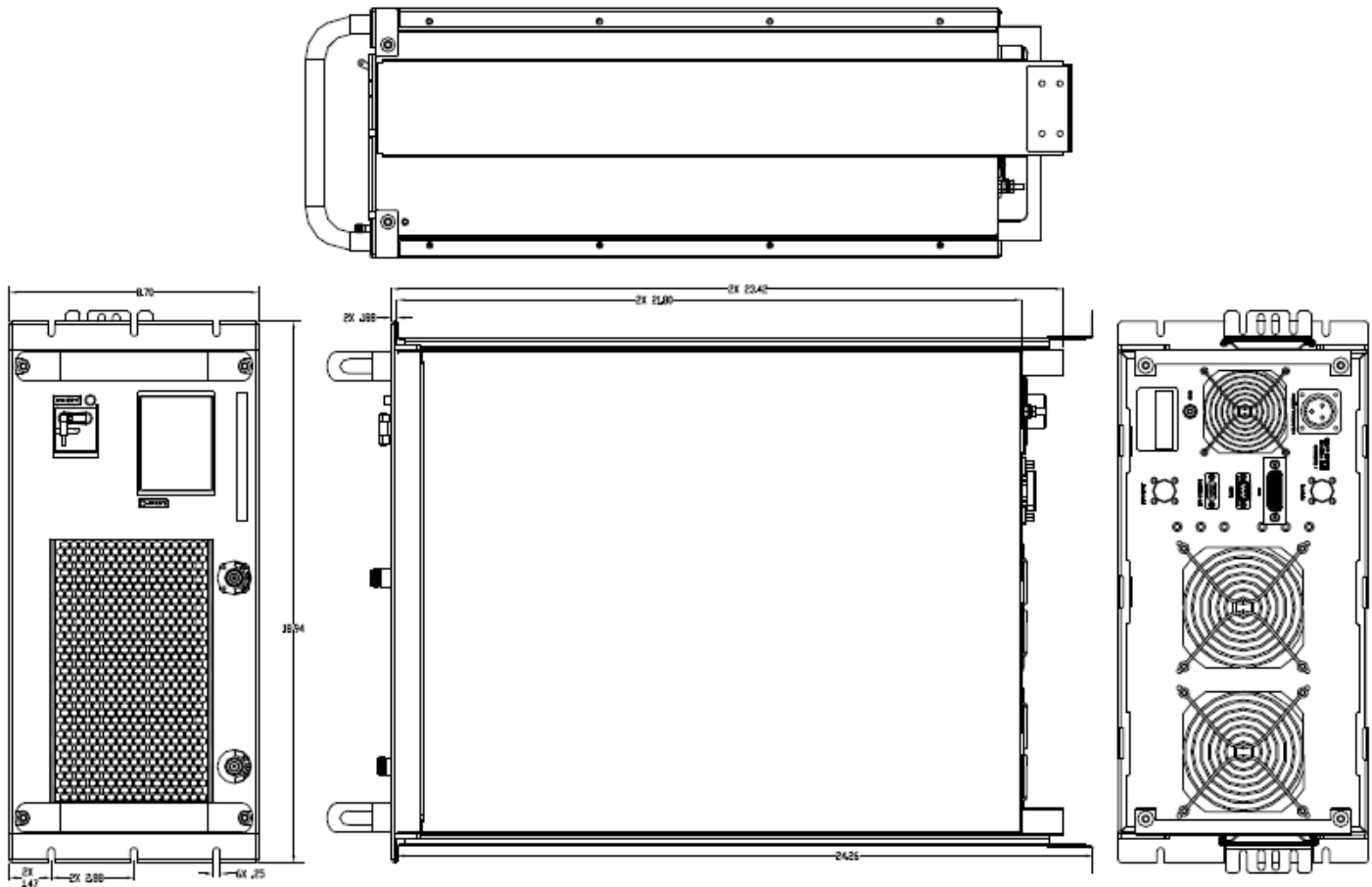
I/O CONNECTOR – Dsub, 9 Pin

Pin #	Description	Specifications
1	Forward Test Point	Analog Voltage 0-5 V Test Point relative to Forward Power Output
2	Reverse Test Point	Analog Voltage 0-5 V Test Point relative to Reverse Power
3	N/C	Reserved
4	EXT Shutdown	Amplifier Disable: TTL High (5 V) Amplifier Enable: TTL Low (0 V) or Open or Ground
5	+5 V Test Point	Measurement Voltage Output 5 V
6	+12 V (Test Point)	Measurement Voltage Output 12 V Test Point
7	PS+ (Test Point)	Measurement Voltage Output 13 V Test Point
8	GND	Ground
9	GND	Ground

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SYSTEM OUTLINE SHOWN WITH OPTION PACKAGE 17



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TYPICAL PERFORMANCE PLOTS

