

# SOLID STATE BROADBAND HIGH POWER AMPLIFIER

Part Number: RM-PA500M3000G55A

## 0.5-3GHz/280Watt/Rack Mount

The RM-PA500M3000G55A is a rack-mount unit with universal power and forced-air cooling, delivering efficient, low-distortion performance with proven reliability.

This rack-mount amplifier uses a universal supply and active cooling for efficient, reliable, low-distortion operation. A compact rack-mount design with universal power, strong cooling, and dependable high-efficiency performance

ISO9001 Quality Assurance Program assures consistent performance and the highest reliability.

### FEATURES:

- |                                 |                           |                                      |                                              |
|---------------------------------|---------------------------|--------------------------------------|----------------------------------------------|
| 1. Small Size and light weight. | 2. Broadband & High power | 3. 50 Ohms input and Output matched. | 4. Built-in control and protection circuits. |
|---------------------------------|---------------------------|--------------------------------------|----------------------------------------------|

### ELECTRICAL SPECIFICATIONS: @+220Vac, 25°C, 50Ω System

N0.	PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
1	Operating Frequency	BW	0.5		3	GHz
2	RF Output Power @Pin=0dBm	P <sub>sat</sub>	200	280		Watt
3	Power Gain	G P		54.5		dB
4	Power Gain Flatness	Δ Gp		±3.0		dB
5	Input Return Loss	S11			-10	dB
6	Harmonics @ POUT =60W	H		-15		dBc
7	Spurious Signals	Spur		-60		dBc

N0.	PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
8	In/Output Impedance			50		Ω
9	Operating Voltage	Vac	180	220	230	Volt
10	Power Consumption@ 60W CW	Pd		1500		Watt

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## MECHANICAL CHARACTERISTICS.

N0.	PARAMETER	VALUE	UNIT	LIMITS
1	Dimensions	482.6 x 133.3 x 500 [19x5.25x19.69] (3U)	mm [inch]	Maximum
2	Weight	20 [44.9]	kg [lbs]	Maximum
3	RF Connectors Input	SMA, Female		
4	RF Connectors Output	Type-N, Female		
5	DC Interface Connector	D-Sub 9-Pin, Male		
6	Cooling	Built-in internal forced air-cooling system		

## ABSOLUTE MAXIMUM RATING

N0.	PARAMETER	VALUE
1	Input RF drive level without damage	+5dBm Maximum
2	Load VSWR @ POUT =30W	3:1 @ PA output power will degrade to a safe operation level, and system will still work. >3:1 @ protection will make system shutdown.
3	Thermal Overload	Power will Gracefully Degrade, when Ambient Temp >85°C

## RS422 INTERFACE CONNECTOR

PIN#	DESCRIPTION	SPECIFICATIONS
1-4	NC	Reserved
5	RS422-T+	Transmit data-TxD
6	RS422-T-	Transmit data-TxD
7	RS422-R+	Transmit data-RxD
8	RS422-R-	Transmit data-RxD
9	GND	Ground

## ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

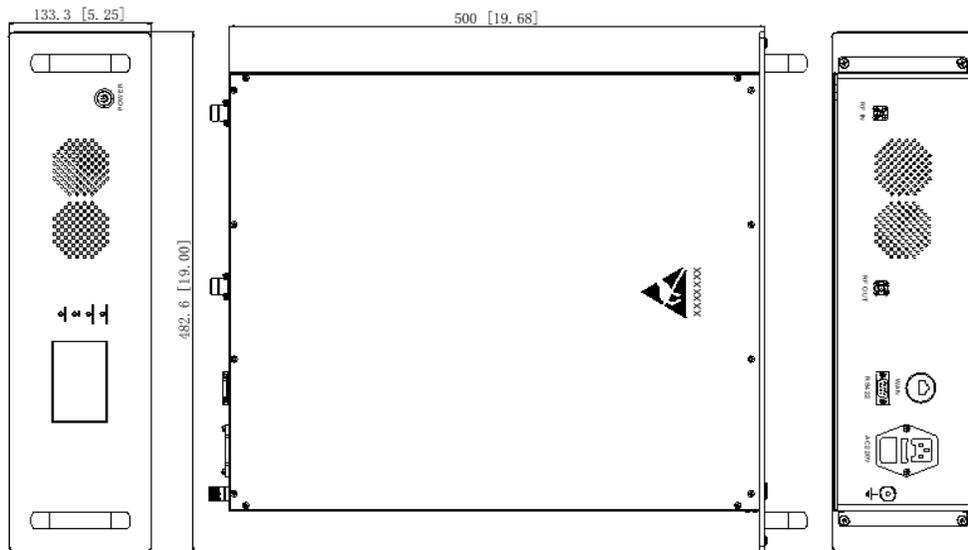
N0.	PARAMETER	MIN.	TYP.	MAX.	UNIT
9	Operating Temperature	-20		50	°C
10	Non-operating Temperature	-45		85	°C
11	Relative Humidity (non-condensing)			95	%

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## MECHANICAL CHARACTERISTICS.

### OUTLINE DRAWING



**Note:**

I. Dimension in mm [inch]

## PERFORMANCE.

### TYPICAL PERFORMANCE PLOTS

