

SOLID STATE BROADBAND HIGH POWER AMPLIFIER

Part Number: RM-PA180G400S48

I8-40GHz/60Watt/Rack Mount

The RM-PA180G400S48 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	18		40	GHz
2	RF Output Power @Pin=0dBm	P _{sat}		60		Watt
3	Power Gain	G P		48		dB
4	Power Gain Flatness	Δ Gp		±3.0		dB
5	Input Return Loss	S11			-10	dB
6	Harmonics @ POUT =25W	H		-10		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		1250		Watt

SOLID STATE BROADBAND HIGH POWER AMPLIFIER

Part Number: RM-PA180G400S48

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	2.92, Female		
4	RF Connectors Output	WRD180		
5	DC Interface Connector	D-Sub 15-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	%



Part Number: RM-PA180G400S48

PERFORMANCE.

TYPICAL PERFORMANCES PLOTS



Psat@Pin=0dBm

Frequency (GHz)	Output Power (Watt)
18	85
19	90
20	86
21	79
22	85
23	82
24	79
25	78
26	76
27	79
28	81
29	73
30	71
31	76
32	74
33	81
34	64
35	68
36	54
37	58
38	61
39	65
40	67

FOR REFERENCE ONLY

RF Output Power@Psat