



The **MP1850/2300/48MK-R2U13** is a broadband high power amplifier for 700-3000 MHz applications. It is suitable for Jamming or communication operation. The amplifier employs advance GaN power devices that provide ample output power, a wide dynamic range, and high efficiency. Integrated ALC provides over power protection and assurance linear amplification. Forced air cooling system, utilizing Low Noise Fans for Quite test in laboratory environment.

Model: MP1850/2300/48MK-R2U13
SKU:7310005



1. Electrical Characteristics

Item	Value	Note
Frequency Range	700 ~ 3000 MHz	
Gain	50 (Min.)	
Gain Flatness	± 2.5 dB (Typ.)	Over Freq. Range
Output Psat	+48 dBm (Min.)	
Input / Output VSWR	2:1 (Max.)	
Harmonics	-15 dBc (Max.)	Pout @ 60 Watts
Spurious	-70 dBc (Max.)	Pout @ 60 Watts
Efficiency	>25%	Pout @ 60 Watts
HPA Enable/Disable	TTL "0V or Open" ⇒ Enable TTL "5V" ⇒ Disable	Pin 5 on DB9-Male
ALC Level	41 ± 0.5 dBm	Factory Default Setting
ALC Range	>10 dBm	Adjustable via Front Panel (Max. 60Watt Pout)
ALC Accuracy	± 0.75 dBm	Over Frequency Band
HPA ON/OFF Speed	2 μSec (Typ.)	
Forward Power Monitor	4.0 ± 0.2 V @ +48 dBm	RMS Detection Pin 1
Reverse Power Monitor	4.0 ± 0.2 V @ +48 dBm	RMS Detection Pin 2
Temperature Monitor	V _t + 500 mV, 10 mV / °C	Pin 3
Current Monitor	10 mV / 100 mA	Pin 4
Thermal Shutdown	+85°C ± 5°C	Auto Recover at +70°C ±5°C
AC Input Voltage	100 – 240 VAC	
AC Input Current	3 A (Max.)	
In/ Out Impedance	50 Ω	
Max. Input Without Damage	+ 10 dBm	

2. Mechanical Characteristics

Monitoring Connector	DB9-Male	4 – 40 screw
RF IN/OUT Connector	N-Type Female	
Status Indications	Power On, ALC On	LED's
Dimensions	19" x 2U	19" x 13" x 3.5"
Weight	16 lbs	

3. Environment Characteristics

Operating Temperature	-20°C ~ +50°C	Ambient
Cooling	Cooling Fans	
Humidity (Non-condensing)	95% (Max.)	

4. DB9-Male Pin Description

1	Forward Power Monitor	
2	Reverse Power Monitor	
3	Temperature Monitor	V _t + 500 mV, 10 mV / °C
4	Current Sensor	
5	Enable/Disable	0V or Open: Enable 5V: Disable
6,7	NC	
8,9	GND	

Options Included: R2U13, 12V1, N/NM SNE, FPGA, RM9, FPPS

5. Outline Drawing

