



The MP4000/4G/53HK-A-R4U20 is a high power amplifier for 2000~ 6000 MHz frequency band. The amplifier system employs GaN devices and provides high efficiency, broad band and high dynamic range, protected against over-temperature, over driving, over-power, and excessive current draw. It provides remote control function via RS232 and ETHERNET interface for remote access and control. GUI/Firmware control is provided.

Model: MP4000/4G/53HK-A-R4U20

Options: R4U15, CONTR, ETHER/RS232, 12V1, FFPS, SNB, N/N



1. Electrical Characteristics

Item	Value	Note
Frequency Range	2000 ~ 6000 MHz	
Gain	53 dB (Min.)	Pout @ 200 Watts CW
Gain Flatness	± 2.0 dB (Typ.)	Over Freq. Range
Output Psat	+ 53 dBm (Min.)	
Input / Output VSWR	1.5:1 (Typ.)	
Output Protection		Via GUI
Harmonics	- 15 dBc (Typ.)	
Spurious	- 65 dBc (Max.)	Pout @ 200 Watts CW
HPA Enable/Disable		Set by GUI
ALC Range	> 25 dB	Set by GUI
ALC Accuracy	± 1.0 dB (Typ.)	
Input Power Monitor	Real Time Monitoring	Via GUI
FWD Power Monitor	Real Time Monitoring	Via GUI
REV Power Monitor	Real Time Monitoring	Via GUI
Power Monitor Accuracy	± 1.0 dB (Typ.)	
Max RF Input	+ 10 dBm	
AC Input	100 – 240 VAC	Single Phase
Power Consumption	1200W	Pout @ 200 Watts CW
Input / Output Impedance	50 Ω	

2. Mechanical Characteristics

RS232 Connector	DB9-Female	
ETHERNET	RJ45	
RF IN/OUT Connector	N-Type Female	
Dimensions	19" x 4U x 20"	
Weight	45 lbs	

3. Environment Characteristics

	Min.	Typ.	Max.
Operating Ambient Temperature (°C)	-10		+50
Non-operating Temperature (°C)	-20		+85
Relative Humidity (% Non Condensing)			95
Altitude (Feet) MIL-STD-810F (Method 500.4, Proc I) (Designed to meet)	0		10,000'
Shock / Vibration per MIL-STD-810F (Designed to meet)	(Shock Method 516.5, Proc I) (Vibration Method 514.5, Proc I)		
Cooling	Internal Forced Fan From Front to Back		

4. Firmware Control

Output Power Monitoring	Real Time; 24~53 dBm	Via GUI
Input Power Monitoring	Real Time; -10~19 dBm	Shutdown @ +10 dBm
Reverse Power Monitoring	Real Time; 24~53 dBm	Shutdown @ TBD
Over-Driving Protection	Setting	Alarm
Current Monitoring	Real-Time	Shutdown @ TBD
Temperature Monitoring	Real-Time; Above +0°C	Shutdown @ +70°C
Operating Voltage	Real-Time	Alarm
Fan Current Monitoring	Real-Time	Alarm

5. DB9-Female Pin Description

1	N/C	
2	RS232 Rx	
3	RS232 Tx	
4	N/C	
5	GND	
6, 7, 8, 9	NC	

Revision History

REV	Reason to Change	Date	Initialed by

SKU # 7xxxxx

7. Outline Drawing

