



The MP5500/100/47MK-A1 is suitable for Wi-Max and LTE high power linear applications. The amplifier employs linear GaAs power devices that provide sufficient output power, wide dynamic range, and high gain.



Model: MP5500/800/47MK-A1

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	5100 ~ 5900 MHz	
Gain	47 dB (Min.)	
Gain Flatness	± 1.0 dB	Over Freq. Range
Gain Variation	± 1 dB	Over Temp. Range
Output Power P1	+47 dBm (Typ.)	
Output Power Psat	+47.5 (Min.), +48 dBm (Typ.)	
Input / Output VSWR	≤ 1.5	
Harmonics	-45 dBc (Max.)	@ +47 dBm Output
Spurious	-70 dBc (Max.)	@ +47 dBm Output
HPA Enable/Disable	TTL "LOW" ⇒ Enable TTL "HIGH" ⇒ Disable	
Switch On/Off Rise/Fall Time @ 90% Power Output	4 μs (Max.)	Measured with TTL Control Signal: f = 2 KHz, 50% Duty Cycle
DC Input Voltage / Current	+12 VDC / 24A (Max.)	P. Out @ 50 Watts CW
Temperature Monitor	Vt + 500mV, 10mV/°C	Pin 4
Input / Output Impedance	50 Ω	
Max Input Signal (without Damage)	+5 dBm	
Load Conditions	∞ : 1	Output Isolator Included

2. Mechanical Characteristics		
Monitoring Connector	DB-9-Male	4 – 40 screw
RF IN/OUT Connector	SMA 4 Holes – Female	
DC Input	Pin 6,7 on DB-9	
Dimensions	7.5" x 4.98" x 0.93"	
Weight	1.2 lb	

3. Environment Characteristics		
Operating Temperature	-30°C ~ +75°C	Base Plate
Storage Temperature	-40°C ~ +95°C	
Cooling	External Heat-Sink	
Humidity (Non-condensing)	95% (Max.)	Designed to meet: IAW MIL-STD-810F
Operating Altitude	10,000 Feet (Min.)	
Vibration and Shock	Vibration 6.06 gRMS	Designed to meet: IAW MIL-STD-810F

Revision History

REV	Reason to Change	Date	Initialed by
	Production Approved	03/26/16	Y.Z.

4. DB9 Pin Description		
1, 2	+ 12V	
3	NC	
4	Temperature Monitor	
5	Enable/Disable	Enable: TTL Low Disable: TTL High or Open
6, 7	+ 12V	
8, 9	Ground	

5. Outline Drawing

