



The MP750/100/50MK-A1 is suitable for broadband high power linear applications. The amplifier employs linear LDMOS power devices that provide sufficient output power, wide dynamic range, and high gain. It supports GSM, CDMA, and SPECIFICALLY for LTE applications.

### Model: MP750/100/50MK-A1

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	710 ~ 800 MHz	
Gain	50 ± 1 dB	
Gain Flatness	± 1.0 dB (Typ.)	Over Freq. Range
Gain Variation	± 1.0 dB (Typ.)	Over Temp. Range
Output Power P1 720-780 MHz	+50 dBm (Typ.)	
Output Power P1 710-800 MHz	+49 dBm (Typ.)	
Output Power Psat	+51 dBm (Min.)	
Input / Output VSWR	≤ 1.2 (Max.)	
Spurious	-70 dBc (Max.)	
HPA Enable/Disable	TTL "0V or Open" ⇒ Enable TTL "5V" ⇒ Disable	
Power Ramp up/down @ 10-90% Time	< 5 μs (Max.)	
Output IP3	+62 dBm (Typ.)	Two Tones @ +40 dBm per tone, 1 MHz Spacing.
Forward Power Monitor	4.0 ± 0.1 V @ +40 dBm	RMS Detection
Reverse Power Monitor	4.0 ± 0.1 V @ +40 dBm	RMS Detection
Insertion Loss Tx/Rx to Rx	0.5 dB (Typ.)	
DC Input Voltage / Current	+28 VDC ± 1V / 2.6A (Typ.)	DC Input Voltage / Current @ LTE Pout 10 W Auto Recover @ +70°C ±5°C
Thermal Shutdown	+85°C ±5°C	
VSWR Protection	Circulator Included	
Input / Output Impedance	50 Ω	
Max. Input Power without Damage	+2 dBm	

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	6.8" x 5.0" x 1.0"	

Revision History			
REV	Reason to Change	Date	Initialed by

3. Environment Characteristics		
Operating Temperature	-20°C ~ +75°C	Base Plate

4. DB9 Pin Description		
1	Forward Power Monitor	
2	Reverse Power Monitor	
3	N/C	
4	N/C	
5	Enable / Disable	Enable: TTL Low or Open Disable: TTL High
6, 7	28V	
8, 9	Ground	

Note: ALC Control is available as an option.

### 5. Outline Drawing

