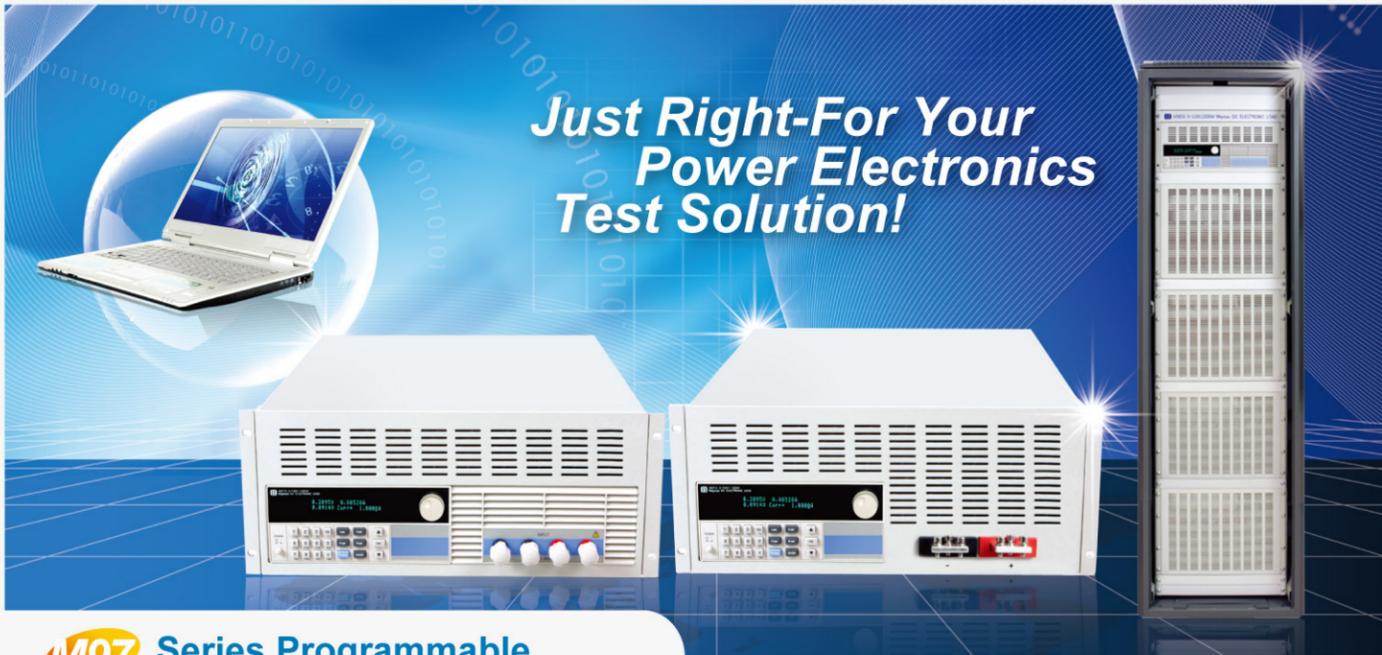




INTRODUCTION

Maynuo Electronic Co.,Ltd, a professional R & D and production of high-performance test equipment and facilities, such as programmable DC electronic loads, programmable DC power supply, high power load, high power supply, AC power supply, mobile test power supply, etc., mainly works at providing automated testing solutions for electrical, electronic, aerospace, military, chemical, automotive, battery charger, battery, solar cell production lines and other industries. With a number of outstanding rich experienced R & D personnel, we are committed to providing users with more accurate, more stable, more easily accessible to the higher cost of test instruments, and to creating the internationally influential brand in testing.

Just Right-For Your Power Electronics Test Solution!



M97 Series Programmable DC Electronic Load

The M97 series DC electronic load is a new generation product from Maynuo Electronic Co. Ltd. The loads are designed with high-performance components and offer high speed with a resolution of 0.1 mV and 0.01 mA (the basic accuracy is 0.03%, the basic current rise speed is 2.5 A/μs). The M97 series has a wide application range in production line (cell phone charger, cell phone battery, electric vehicle battery, switching power supplies, linear power supplies etc.), research institutes, automotive electronics, aeronautical and astronautical, ships, solar cells, fuel cells, and so on.

The M97 series offers users with its novel and high quality design and attractive cost-effectiveness.

Features

- Six high speed operation molds: CC,CR,CV,CW,CC+CV,CR+CW
- Over current, over voltage, over power, over heat, polarity reversed protection
- High-luminance VFD screen with two lines& four channels display
- Intelligent fan system fan will be automatically initiated according to the temperature
- Soft start time setting, carrying the power supplier according to the voltage value set
- Battery testing and short-circuit function
- Available for dynamic testing with rising edge/falling edge setting
- Supporting external trigger input and output
- External current waveform monitor terminal
- Supporting remote voltage compensation and multidata storage
- Power-on-self-test, software calibration and standard rack mount
- Communication mode: GPIB/RS232/RS485/USB.



● M9711-M9712 ● M9711-M9712 back panel ● M9711-M9712 ● M9711-M9712 back panel

M97 Series Programmable DC Electronic Load Technical Specification Table

Model 型号	M9711	M9712	M9712B	M9712C
Power	150W	300W	300W	300W
Input Rating				
Current	0-30A	0-30A	0-15A	0-60A
Voltage	0-150V	0-150V	0-500V	0-150V
Range	0-3A	0-30A	0-3A	0-6A
Resolution	0.1mA	1mA	0.1mA	1mA
Accuracy	0.03%+0.05%FS	0.03%+0.05%FS	0.03%+0.05%FS	0.03%+0.05%FS
CV Mode				
Range	0.1-19.999V	0.1-150V	0.1-19.999V	0.1-150V
Resolution	1mV	10mV	1mV	10mV
Accuracy	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.02%FS
CR Mode				
Range	0.03 Ω-10KΩ	0.03 Ω-5KΩ	0.03 Ω-10KΩ	0.03 Ω-5KΩ
Resolution	16 位	16 位	16 位	16 位
Accuracy	0.1%+0.1%FS	0.1%+0.1%FS	0.1%+0.1%FS	0.1%+0.1%FS
CW Mode				
Range	0-150W	0-150W	0-300W	0-300W
Resolution	1mW	10mW	1mW	10mW
Accuracy	0.1%+0.1%FS	0.1%+0.1%FS	0.1%+0.1%FS	0.1%+0.1%FS
V Measurement				
Range	0-19.999V	0-150V	0-19.999V	0-150V
Resolution	1mV	10mV	1mV	10mV
Accuracy	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.03%FS
I Measurement				
Range	0-3A	0-30A	0-3A	0-30A
Resolution	0.01mA	0.1mA	0.01mA	0.1mA
Accuracy	0.03%+0.05%FS	0.03%+0.08%FS	0.03%+0.05%FS	0.03%+0.08%FS
W Measurement				
Range	100W	150W	100W	300W
Resolution	1mW	10mW	1mW	10mW
Accuracy	0.1%+0.1%FS	0.1%+0.1%FS	0.1%+0.1%FS	0.1%+0.1%FS

Battery Measurement 电池测试功能
 Dynamic Measurement 动态测试功能
 CC soft-startupTime 电流软启动时间

Battery Input: 0.1-150V; Max. Measurement: Capacity=999H; Resolution=0.1mA; Time Range=1S-16HS
 Transition List: 0-25kHz; 2.5A/μs; T1&T2: 60μs; -999S; Accuracy: ± 15% offset+10% FS
 1mS; 2mS; 5mS; 10mS; 20mS; 50mS; 100mS; 200mS; 500mS; 1000mS; Accuracy: ± 15% offset+10% FS

Short Circuit	Current(CC)	≈3.3A	≈33A	≈3.3A	≈33A	≈3.3A	≈18A	≈6.6A	66A
短路功能	Voltage(CV)	0V	0V	0V	0V	0V	0V	0V	0V
	Resistance(CR)	≈55mΩ	≈28mΩ	≈280mΩ	≈25mΩ				
Temperature	Operating	0~40℃	0~40℃	0~40℃	0~40℃				
	Nonoperating	-10℃~70℃	-10℃~70℃	-10℃~70℃	-10℃~70℃				

Dimension	W*H*D(mm)	214*108*365
Weight	Kg	3.5



● M9713-M9714

● M9713-M9714 back panel

M97 Series Programmable DC Electronic Load Technical Specification Table

Model 型号	M9713		M9713B		M9714		M9714B		
Power	600W		600W		1200W		1200W		
Input Rating 额定输入	0-120A		0-30A		0-240A		0-60A		
	0-150V		0-500V		0-150V		0-500V		
CC Mode 定电流模式	Range	0-12A	0-120A	0-3A	0-30A	0-24A	0-240A	0-6A	0-60A
	Resolution	1mA	10mA	0.1mA	1mA	1mA	10mA	0.1mA	1mA
	Accuracy	0.05%+0.05%FS	0.1%+0.05%FS	0.03%+0.05%FS	0.03%+0.05%FS	0.05%+0.05%FS	0.1%+0.05%FS	0.03%+0.05%FS	0.03%+0.05%FS
CV Mode 定电压模式	Range	0.1-19.999V	0.1-150V	0.1-19.999V	0.1-500V	0.1-19.999V	0.1-150V	0.1-19.999V	0.1-500V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.05%FS	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.05%FS
CR Mode 定电阻模式	Range	0.03Ω-10K	0.03Ω-5K	0.03Ω-10K	0.03Ω-5K	0.3Ω-10K	0.3Ω-5K	0.03Ω-10K	0.03Ω-5K
	Resolution	16位							
	Accuracy	0.1%+0.1%FS							
CW Mode 定功率模式	Range	0-600W	0-600W	0-600W	0-600W	0-1200W	0-1200W	0-1200W	0-1200W
	Resolution	1mW	10mW	1mW	10mW	1mW	10mW	1mW	10mW
	Accuracy	0.1%+0.1%FS							
V Measurement 电压测量值	Voltage	0-19.999V	0-150V	0-19.999V	0-500V	0-19.999V	0-150V	0-19.999V	0-500V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.05%FS	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.05%FS
I Measurement 电流测量值	Current	0-12A	0-120A	0-3A	0-30A	0-24A	0-240A	0-6A	0-60A
	Resolution	0.1mA	1mA	0.01mA	0.1mA	0.1mA	1mA	0.01mA	0.1mA
	Accuracy	0.05%+0.05%FS	0.1%+0.08%FS	0.03%+0.05%FS	0.03%+0.08%FS	0.05%+0.05%FS	0.1%+0.1%FS	0.03%+0.05%FS	0.03%+0.08%FS
W Measurement 功率测量值	Watt	100W	600W	100W	600W	100W	1200W	100W	1200W
	Resolution	1mW	10mW	1mW	10mW	1mW	10mW	1mW	10mW
	Accuracy	0.1%+0.1%FS							

Battery Measurement 电池测试功能
Dynamic Measurement 动态测试功能
CC soft-startupTime 电流软启动时间

Battery Input: 0.1-150V; Max. Measurement: Capacity=999/H; Resolution=0.1mA; Time Range=1S-16HS
Transition List: 0-25kHz; 2.5A/μS; T1&T2:60μS-999S; Accuracy: ± 15% offset+10% FS
1mS; 2mS; 5mS; 10mS; 20 mS; 50 mS; 100 mS; 200 mS; 500 mS; 1000 mS; Accuracy: ± 15% offset+10% FS

Short Circuit 短路功能	Current(CC)	≈13.2A	≈132A	≈3.3A	≈33A	≈26.4A	≈264A	≈6.6A	66A
	Voltage(CV)	0V		0V		0V		0V	
	Resistance(CR)	≈13mΩ		≈100mΩ		≈7mΩ		≈50mΩ	
Temperature	Operating	0 ~ 40°C		0 ~ 40°C		0 ~ 40°C		0 ~ 40°C	
	Nonoperating	-10°C ~ 70°C		-10°C ~ 70°C		-10°C ~ 70°C		-10°C ~ 70°C	

Dimension	W*H*D(mm)	103.5*428*453.5
Weight	Kg	17.6



● M9715-M9716

● M9715-M9716 back panel

M97 Series Programmable DC Electronic Load Technical Specification Table

Model 型号	M9715		M9715B		M9716		M9716B		
Power	1800W		1800W		2400W		2400W		
Input Rating 额定输入	0-240A		0-120A		0-240A		0-120A		
	0-150V		0-500V		0-150V		0-500V		
CC Mode 定电流模式	Range	0-24A	0-240A	0-12A	0-120A	0-24A	0-240A	0-12A	0-120A
	Resolution	1mA	10mA	1mA	10mA	1mA	10mA	1mA	10mA
	Accuracy	0.05%+0.05%FS	0.1%+0.05%FS	0.05%+0.05%FS	0.1%+0.05%FS	0.05%+0.05%FS	0.1%+0.05%FS	0.05%+0.05%FS	0.1%+0.05%FS
CV Mode 定电压模式	Range	0.1-19.999V	0.1-150V	0.1-19.999V	0.1-500V	0.1-19.999V	0.1-150V	0.1-19.999V	0.1-500V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.05%FS	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.05%FS
CR Mode 定电阻模式	Range	0.03Ω-10K	0.03Ω-5K	0.03Ω-10K	0.03Ω-5K	0.3Ω-10K	0.3Ω-5K	0.03Ω-10K	0.03Ω-5K
	Resolution	16位							
	Accuracy	0.1%+0.1%FS							
CW Mode 定功率模式	Range	0-1800W	0-1800W	0-1800W	0-1800W	0-2400W	0-2400W	0-2400W	0-2400W
	Resolution	1mW	10mW	1mW	10mW	1mW	10mW	1mW	10mW
	Accuracy	0.1%+0.1%FS							
V Measurement 电压测量值	Voltage	0-19.999V	0-150V	0-19.999V	0-500V	0-19.999V	0-150V	0-19.999V	0-500V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.05%FS	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.05%FS
I Measurement 电流测量值	Current	0-24A	0-240A	0-12A	0-120A	0-24A	0-240A	0-12A	0-120A
	Resolution	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA
	Accuracy	0.03%+0.05%FS	0.1%+0.1%FS	0.03%+0.05%FS	0.1%+0.08%FS	0.03%+0.05%FS	0.1%+0.1%FS	0.03%+0.05%FS	0.1%+0.08%FS
W Measurement 功率测量值	Watt	100W	1800W	100W	1800W	100W	2400W	100W	2400W
	Resolution	1mW	10mW	1mW	10mW	1mW	10mW	1mW	10mW
	Accuracy	0.1%+0.1%FS							

Battery Measurement 电池测试功能
Dynamic Measurement 动态测试功能
CC soft-startupTime 电流软启动时间

Battery Input: 0.1-150V; Max. Measurement: Capacity=999/H; Resolution=0.1mA; Time Range=1S-16HS
Transition List: 0-25kHz; 5A/μS; T1&T2: 60μS-999S; Accuracy: ± 15% offset+10% FS
1mS; 2mS; 5mS; 10mS; 20 mS; 50 mS; 100 mS; 200 mS; 500 mS; 1000 mS; Accuracy: ± 15% offset+10% FS

Short Circuit 短路功能	Current(CC)	≈26.4A	≈264A	≈13.2A	≈132A	≈26.4A	≈264A	≈13.2A	132A
	Voltage(CV)	0V		0V		0V		0V	
	Resistance(CR)	≈6mΩ		≈50mΩ		≈6mΩ		≈50mΩ	
Temperature	Operating	0 ~ 40°C		0 ~ 40°C		0 ~ 40°C		0 ~ 40°C	
	Nonoperating	-10°C ~ 70°C		-10°C ~ 70°C		-10°C ~ 70°C		-10°C ~ 70°C	

Dimension	W*H*D(mm)	207*428*453.5
Weight	Kg	31.6



● M9717-M9718

● M9717-M9718 back panel



● M9836

M97 Series Programmable DC Electronic Load Technical Specification Table

Model 型号	M9717		M9717B		M9718		M9718B		
Power	3600W		3600W		6000W		6000W		
Input Rating 额定输入	0-240A		0-120A		0-240A		0-120A		
	0-150V		0-500V		0-150V		0-500V		
CC Mode 定电流模式	Range	0-24A	0-240A	0-12A	0-120A	0-24A	0-240A	0-12A	0-120A
	Resolution	1mA	10mA	1mA	10mA	1mA	10mA	1mA	10mA
	Accuracy	0.05%+0.05%FS	0.1%+0.05%FS	0.05%+0.05%FS	0.1%+0.05%FS	0.05%+0.05%FS	0.1%+0.05%FS	0.05%+0.05%FS	0.1%+0.05%FS
CV Mode 定电压模式	Range	0.1-19.999V	0.1-150V	0.1-19.999V	0.1-500V	0.1-19.999V	0.1-150V	0.1-19.999V	0.1-500V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.05%FS	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.02%FS	0.03%+0.05%FS
CR Mode 定电阻模式	Range	0.03Ω-10K	0.03Ω-5K	0.03Ω-10K	0.03Ω-5K	0.3Ω-10K	0.3Ω-5K	0.03Ω-10K	0.03Ω-5K
	Resolution	16位							
	Accuracy	0.1%+0.1%FS							
CW Mode 定功率模式	Range	0-3600W	0-3600W	0-3600W	0-3600W	0-6000W	0-6000W	0-6000W	0-6000W
	Resolution	1mW	10mW	1mW	10mW	1mW	10mW	1mW	10mW
	Accuracy	0.1%+0.1%FS							
V Measurement 电压测量值	Voltage	0-19.999V	0-150V	0-19.999V	0-500V	0-19.999V	0-150V	0-19.999V	0-500V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.05%FS	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.03%FS	0.015%+0.05%FS
I Measurement 电流测量值	Current	0-24A	0-240A	0-12A	0-120A	0-24A	0-240A	0-12A	0-120A
	Resolution	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA
	Accuracy	0.03%+0.05%FS	0.1%+0.08%FS	0.03%+0.05%FS	0.1%+0.08%FS	0.03%+0.05%FS	0.1%+0.08%FS	0.03%+0.05%FS	0.1%+0.08%FS
W Measurement 功率测量值	Watt	100W	3600W	100W	3600W	100W	6000W	100W	6000W
	Resolution	1mW	10mW	1mW	10mW	1mW	10mW	1mW	10mW
	Accuracy	0.1%+0.1%FS							

Battery Measurement 电池测试功能
Dynamic Measurement 动态测试功能
CC soft-startupTime 电流软启动时间

Battery Input: 0.1-150V; Max. Measurement: Capacity=999/H; Resolution=0.1mA; Time Range=1S-16HS
Transition List: 0-25kHz; 5A/μS; T1&T2: 60μS-999S; Accuracy: ± 15% offset+10% FS
1mS; 2mS; 5mS; 10mS; 20 mS; 50 mS; 100 mS; 200 mS; 500 mS; 1000 mS; Accuracy: ± 15% offset+10% FS

Short Circuit 短路功能	Current(CC)	≈26.4A	≈264A	≈13.2A	≈132A	≈26.4A	≈264A	≈13.2A	132A
	Voltage(CV)	0V		0V		0V		0V	
Resistance(CR)	≈8mΩ		≈45mΩ		≈7mΩ		≈35mΩ		
Temperature	Operating	0 ~ 40°C		0 ~ 40°C		0 ~ 40°C		0 ~ 40°C	
	Nonoperating	- 10°C ~ 70°C		- 10°C ~ 70°C		- 10°C ~ 70°C		- 10°C ~ 70°C	

Dimension W*H*D(mm) 489.5*357*538.5
Weight Kg 70

M97 Series Programmable DC Electronic Load Technical Specification Table

Model 型号	M9838B		M9839B		M9840B		M9840		
Power	50000W		100000W		200000W		200000W		
Input Rating 额定输入	0-240A		0-240A		0-500A		0-1500A		
	0-500V		0-500V		0-500V		0-150V		
CC Mode 定电流模式	Range	0-24A	0-240A	0-24A	0-240A	0-50A	0-500A	0-24A	0-240A
	Resolution	1mA	10mA	1mA	10mA	1mA	10mA	1mA	10mA
	Accuracy	0.1%+0.05%FS	0.15%+0.1%FS	0.1%+0.05%FS	0.15%+0.1%FS	0.1%+0.05%FS	0.15%+0.2%FS	0.1%+0.1%FS	0.2%+0.5%FS
CV Mode 定电压模式	Range	0.1-19.999V	0.1-500V	0.1-19.999V	0.1-500V	0.1-19.999V	0.1-500V	0.1-19.999V	0.1-150V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	0.03%+0.02%FS	0.03%+0.05%FS	0.03%+0.02%FS	0.03%+0.05%FS	0.03%+0.02%FS	0.03%+0.05%FS	0.03%+0.02%FS	0.03%+0.02%FS
CR Mode 定电阻模式	Range	0.03Ω-10K	0.03Ω-5K	0.03Ω-10K	0.03Ω-5K	0.3Ω-10K	0.3Ω-5K	0.03Ω-10K	0.03Ω-5K
	Resolution	16位							
	Accuracy	0.1%+0.1%FS	0.2%+0.15%FS	0.1%+0.1%FS	0.1%+0.1%FS	0.1%+0.1%FS	0.2%+0.15%FS	0.1%+0.1%FS	0.1%+0.1%FS
CW Mode 定功率模式	Range	0-12000W	0-50000W	0-12000W	0-100000W	0-25000W	0-200000W	0-15000W	0-200000W
	Resolution	10mV	100mV	10mV	100mV	10mV	100mV	10mV	100mV
	Accuracy	0.1%+0.1%FS	0.2%+0.15%FS	0.1%+0.1%FS	0.1%+0.1%FS	0.2%+0.15%FS	0.2%+0.15%FS	0.1%+0.1%FS	0.2%+0.15%FS
V Measurement 电压测量值	Voltage	0-19.999V	0-500V	0-19.999V	0-500V	0-19.999V	0-500V	0-19.999V	0-150V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	0.015%+0.03%FS	0.015%+0.05%FS	0.015%+0.03%FS	0.015%+0.05%FS	0.015%+0.03%FS	0.015%+0.05%FS	0.015%+0.03%FS	0.015%+0.03%FS
I Measurement 电流测量值	Current	0-24A	0-240A	0-24A	0-240A	0-50A	0-500A	0-100A	0-1000A
	Resolution	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA	1mA	10mA
	Accuracy	0.1%+0.05%FS	0.15%+0.1%FS	0.1%+0.05%FS	0.15%+0.1%FS	0.1%+0.05%FS	0.15%+0.2%FS	0.1%+0.1%FS	0.2%+0.5%FS
W Measurement 功率测量值	Watt	100W	50000W	100W	100000W	100W	200000W	100W	200000W
	Resolution	1mW	10mW	1mW	10mW	1mW	100mW	1mW	100mW
	Accuracy	0.1%+0.05%FS	0.15%+0.1%FS	0.1%+0.05%FS	0.15%+0.1%FS	0.1%+0.05%FS	0.15%+0.2%FS	0.1%+0.1%FS	0.2%+0.5%FS

Battery Measurement 电池测试功能
Dynamic Measurement 动态测试功能
CC soft-startupTime 电流软启动时间

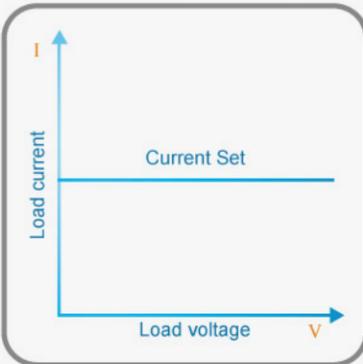
Battery Input: 0.1-150V; Max. Measurement: Capacity=999/H; Resolution=0.1mA; Time Range=1S-16HS
Transition List: 0-25kHz; 5A/μS; T1&T2: 60μS-999S; Accuracy: ± 15% offset+10% FS
1mS; 2mS; 5mS; 10mS; 20 mS; 50 mS; 100 mS; 200 mS; 500 mS; 1000 mS; Accuracy: ± 15% offset+10% FS

Short Circuit 短路功能	Current(CC)	≈26.4A	≈264A	≈26.4A	≈264A	≈55A	≈550A	≈100A	1000A
	Voltage(CV)	0V		0V		0V		0V	
Resistance(CR)	≈3.8mΩ		≈3.2mΩ		≈2.6mΩ		≈2.3mΩ		
Temperature	Operating	0 ~ 40°C		0 ~ 40°C		0 ~ 40°C		0 ~ 40°C	
	Nonoperating	- 10°C ~ 70°C		- 10°C ~ 70°C		- 10°C ~ 70°C		- 10°C ~ 70°C	

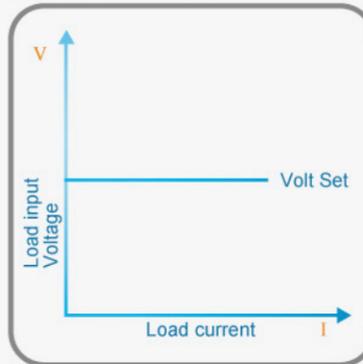
Dimension W*H*D(mm) 600*1880*600*3 600*1880*600*6 600*1880*600*12
Weight Kg 1080 2100 4280



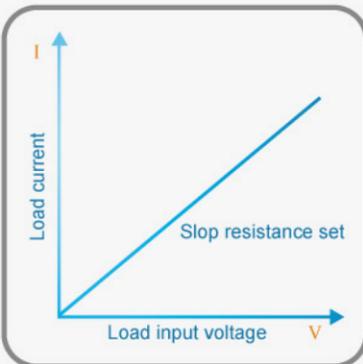
M97 Series Loads Working Modes >>>



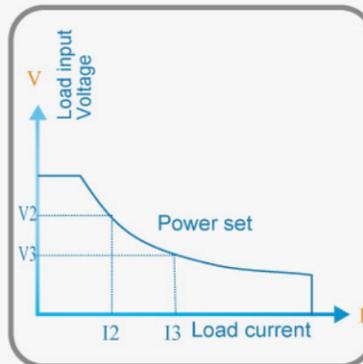
<<< **Constant Current Mode**
In CC mode, the electronic load will sink a current in accordance with the programmed value regardless of the input voltage. Please refer to the left graph.



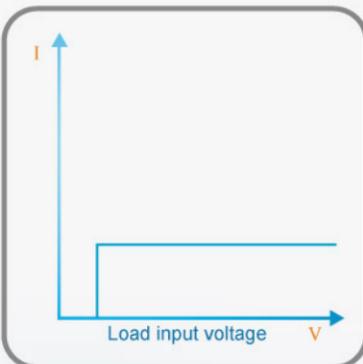
<<< **Constant Voltage Mode**
In CV mode, the electronic load will attempt to sink enough current to control the source voltage to the programmed value. Please refer to the left graph.



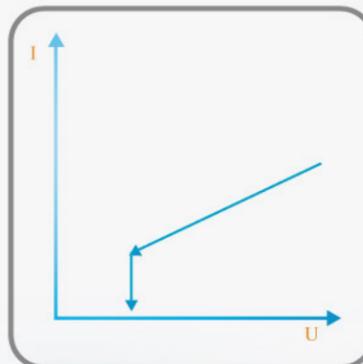
<<< **Constant Resistance Mode**
In CR mode, the module will sink a current linearly proportional to the input voltage in accordance with the programmed resistance. Please refer to the left graph.



<<< **Constant Power Mode**
In CW mode, the electronic loads will consume a constant power. Please refer to the left graph. If the load input voltage value increase, the load input current will decrease. Therefore the load power ($=V * I$) will remain in the power set.

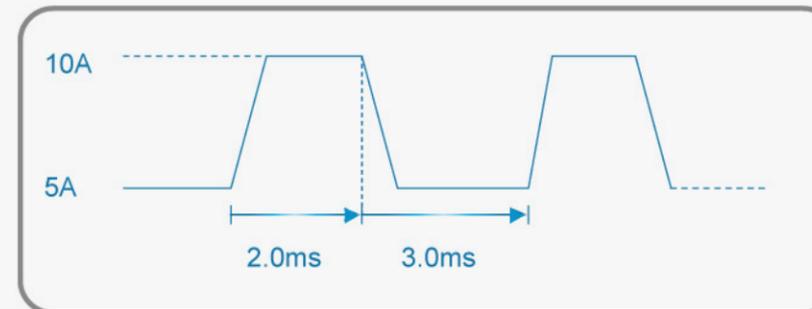


<<< **Constant Current Shifting into Constant Voltage Mode**
In constant current shifting into constant voltage mode, the measured power supply can be avoided from current strike damage.

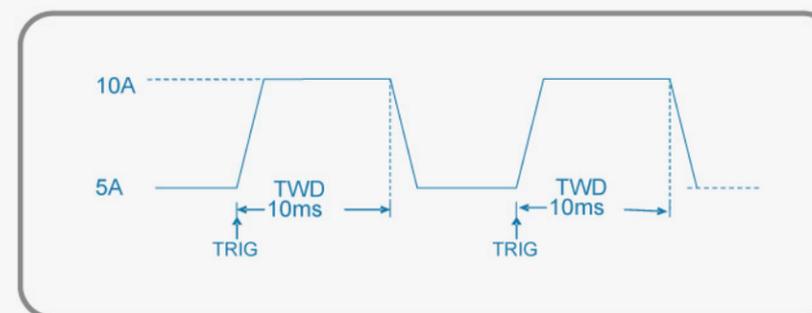


<<< **Constant Resistance Shifting into Constant Voltage Mode**
In constant resistance shifting into constant voltage mode, the measured power supply can be avoided from current strike damage.

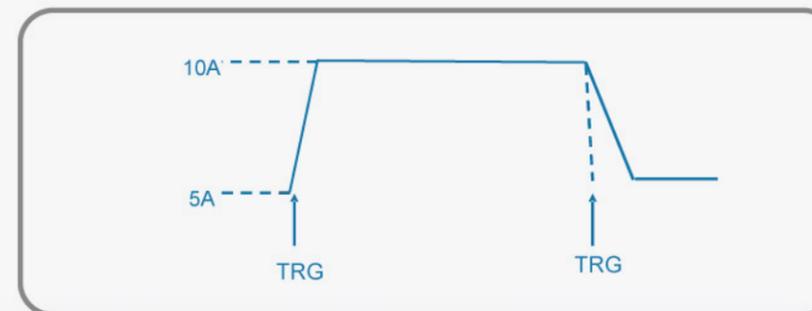
Dynamic Test >>>



<<< **Continuous Operation Mode**
In continuous mode, the electronic load will periodically switch between value A and value B when the dynamic testing operation is turned on.



<<< **Pulse Operation Mode**
In pulse mode, when the dynamic testing operation is turned on, the electronic load will switch to value B as receiving one trigger signal, taking the pulse time(TWD) of value B, Load will return to Value A.



<<< **Trigger Operation Mode**
In trigger mode, when the dynamic testing operation is turned on, the electronic load will switch the state between value A and value B once receiving a triggering signal.

Automatic Test >>>



The M97 electronic load is available of automatic testing function. 8 sets of data can be edited at most and 50 steps can be edited in each set of data. Each step can be edited as the following six working mode: load off mode, constant current mode, constant voltage mode, constant power mode, constant resistance mode, short circuit mode, and can be edited as the following four types: current comparison, voltage comparison, power comparison and resistance comparison. Besides, the delay time of each step can also be edited. The delay time of each step ranges from 0.1~25.5S, considering the quickness and accuracy. Moreover, M97 series load with PC monitoring software allows quick editing test steps, test report output to the EXCEL table by computer operation.

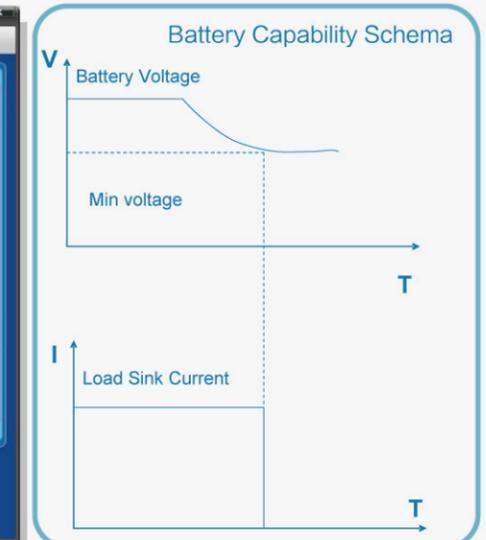
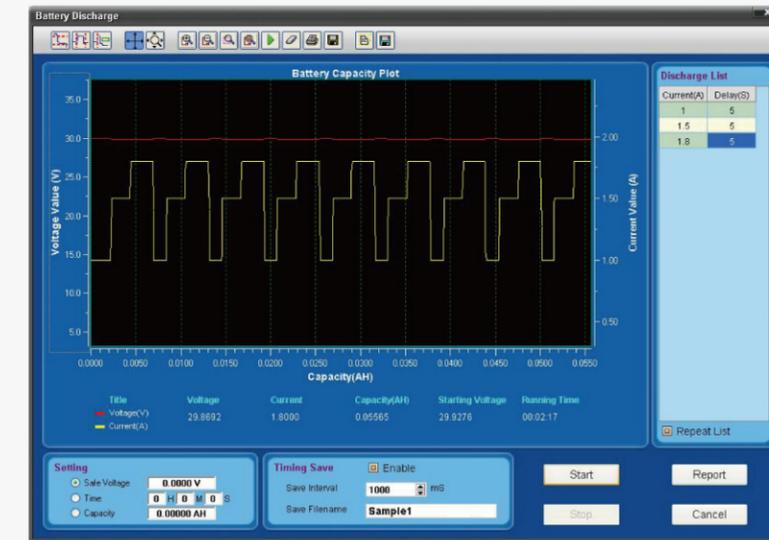
Begin Step	1	
End Step	50	
Set Clear		
<input checked="" type="checkbox"/> Test Mode	CV	
<input checked="" type="checkbox"/> Set Value	11.000 V	~ 30.000 V
<input checked="" type="checkbox"/> Meas. Item	V	<input checked="" type="checkbox"/> Delay 1.000 S
<input checked="" type="checkbox"/> Max Value	11.100 V	~ 30.100 V
<input checked="" type="checkbox"/> Min Value	10.900 V	~ 29.900 V

No.	DateTime	Test Mode	Set Value	Meas. Item	Actual Value	Max	Min	Delay(S)	Pass
1	2010-03-10 10:35:54	CV	11.000	V	10.9983	11.100	10.900	1.000	Pass
2	2010-03-10 10:35:54	CV	11.655	V	11.6529	11.755	11.555	1.000	Pass
3	2010-03-10 10:35:54	CV	12.310	V	12.3097	12.410	12.210	1.000	Pass
4	2010-03-10 10:35:54	CV	12.966	V	12.9637	13.066	12.866	1.000	Pass
5	2010-03-10 10:35:54	CV	13.621	V	13.6179	13.721	13.521	1.000	Pass
6	2010-03-10 10:35:54	CV	14.276	V	14.2758	14.376	14.176	1.000	Pass
7	2010-03-10 10:35:54	CV	14.931	V	14.9293	15.031	14.831	1.000	Pass
8	2010-03-10 10:35:54	CV	15.586	V	15.5819	15.686	15.486	1.000	Pass
9	2010-03-10 10:35:54	CV	16.241	V	16.2388	16.341	16.141	1.000	Pass
10	2010-03-10 10:35:54	CV	16.897	V	16.8961	16.997	16.797	1.000	Pass
11	2010-03-10 10:35:54	CV	17.552	V	17.5487	17.652	17.452	1.000	Pass
12	2010-03-10 10:35:54	CV	18.207	V	18.2042	18.307	18.107	1.000	Pass
13	2010-03-10 10:35:54	CV	18.862	V	18.8613	18.962	18.762	1.000	Pass
14	2010-03-10 10:35:54	CV	19.517	V	19.5157	19.617	19.417	1.000	Pass
15	2010-03-10 10:35:54	CV	20.172	V	20.1707	20.272	20.072	1.000	Pass
16	2010-03-10 10:35:54	CV	20.828	V	20.8264	20.928	20.728	1.000	Pass
17	2010-03-10 10:35:54	CV	21.483	V	21.4812	21.583	21.383	1.000	Pass
18	2010-03-10 10:35:54	CV	22.138	V	22.1341	22.238	22.038	1.000	Pass
19	2010-03-10 10:35:54	CV	22.793	V	22.7912	22.893	22.693	1.000	Pass
20	2010-03-10 10:35:54	CV	23.448	V	23.4448	23.548	23.348	1.000	Pass
21	2010-03-10 10:35:54	CV	24.103	V	24.1014	24.203	24.003	1.000	Pass
22	2010-03-10 10:35:54	CV	24.758	V	24.7548	24.858	24.658	1.000	Pass

Microsoft Excel - AutoTest

A	B	C	D	E	F	G	H	I	J	
1	No.	DateTime	Test Mode	Set Value	Meas. Item	Actual Value	Max	Min	Delay(S)	Pass
2	1	2010-03-10 10:35:54	CV	11.000	V	10.9983	11.100	10.900	1.000	Pass
3	2	2010-03-10 10:35:54	CV	11.655	V	11.6529	11.755	11.555	1.000	Pass
4	3	2010-03-10 10:35:54	CV	12.310	V	12.3097	12.410	12.210	1.000	Pass
5	4	2010-03-10 10:35:54	CV	12.966	V	12.9637	13.066	12.866	1.000	Pass
6	5	2010-03-10 10:35:54	CV	13.621	V	13.6179	13.721	13.521	1.000	Pass
7	6	2010-03-10 10:35:54	CV	14.276	V	14.2758	14.376	14.176	1.000	Pass
8	7	2010-03-10 10:35:54	CV	14.931	V	14.9293	15.031	14.831	1.000	Pass
9	8	2010-03-10 10:35:54	CV	15.586	V	15.5819	15.686	15.486	1.000	Pass
10	9	2010-03-10 10:35:54	CV	16.241	V	16.2388	16.341	16.141	1.000	Pass
11	10	2010-03-10 10:35:54	CV	16.897	V	16.8961	16.997	16.797	1.000	Pass
12	11	2010-03-10 10:35:54	CV	17.552	V	17.5487	17.652	17.452	1.000	Pass
13	12	2010-03-10 10:35:54	CV	18.207	V	18.2042	18.307	18.107	1.000	Pass
14	13	2010-03-10 10:35:54	CV	18.862	V	18.8613	18.962	18.762	1.000	Pass
15	14	2010-03-10 10:35:54	CV	19.517	V	19.5157	19.617	19.417	1.000	Pass
16	15	2010-03-10 10:35:54	CV	20.172	V	20.1707	20.272	20.072	1.000	Pass
17	16	2010-03-10 10:35:54	CV	20.828	V	20.8264	20.928	20.728	1.000	Pass
18	17	2010-03-10 10:35:54	CV	21.483	V	21.4812	21.583	21.383	1.000	Pass
19	18	2010-03-10 10:35:54	CV	22.138	V	22.1341	22.238	22.038	1.000	Pass
20	19	2010-03-10 10:35:54	CV	22.793	V	22.7912	22.893	22.693	1.000	Pass
21	20	2010-03-10 10:35:54	CV	23.448	V	23.4448	23.548	23.348	1.000	Pass
22	21	2010-03-10 10:35:54	CV	24.103	V	24.1014	24.203	24.003	1.000	Pass
23	22	2010-03-10 10:35:54	CV	24.758	V	24.7548	24.858	24.658	1.000	Pass

Battery Test >>>



Constant current mode is applied in M97 Series electronic load to test the battery capability. A program is set to control voltage level. When the voltage of the battery is too low, the electronic load will identify the battery being on the threshold value set or at the margin of insecure state and will stop testing automatically. When the load is in testing procedure, you can see the battery voltage, battery discharge current, electronic, load power and battery capability that has been spared. If the load is connected with PC software, then you can see the discharge curve of battery discharge. This test can test out the reliability and remaining life of battery.

Solar Cell Test >>>



Steps	Volt. Set	Delay	Bat. No.	Voltage	Current	Res.	Power
1	0.000	0.500	1	0.067	1.2193	0.055	0.081
2	0.070	1.2465	0.056	0.088			
3	0.047	1.2597	0.037	0.059			
4	0.060	1.2302	0.055	0.084			
5	0.088	1.2547	0.054	0.086			
6	0.498	1.2208	0.438	0.608			
7	0.500	1.2477	0.401	0.624			
8	0.495	1.2595	0.393	0.624			
9	0.498	1.2314	0.404	0.613			
10	0.497	1.2562	0.396	0.624			
11	0.999	1.2212	0.819	1.220			
12	1.000	1.2478	0.801	1.248			
13	0.999	1.2593	0.794	1.250			
14	1.001	1.2313	0.813	1.233			
15	0.998	1.2581	0.792	1.253			
16	1.500	1.2223	1.227	1.833			

M97 series programmable electronic load, with solar cell test software, can test multi-channel solar cell parameters, query the test report according to the date, preview the test report that need to be printed and fast print the test report, etc. by computer operation.

Just Right-For Your Power Electronics Test Solution!



M88 Series Programmable DC Power Supplier

M88 Series Programmable DC Power Supplier Technical Specification Table

型号		M8811	M8812	M8813	M8851	M8852	M8853
额定输出	电压	0-30V	0-75V	0-150V	0-6V	0-30V	0-75V
	电流	0-5A	0-2A	0-1A	0-60A	0-20A	0-8A
负载调节率	电压	<0.01%+0.5mV	<0.01%+0.5mV	<0.01%+0.5mV	<0.01%+1mV	<0.01%+1mV	<0.01%+1mV
	电流	<0.01%+0.1mA	<0.01%+0.1mA	<0.01%+0.1mA	<0.01%+0.1mA	<0.01%+0.1mA	<0.01%+0.1mA
设定值分辨率	电压	0.5mV	1mV	2mV	0.1mV	0.5mV	1mV
	电流	0.1mA	0.05mA	0.01mA	1mA	0.5mA	0.2mA
回读值分辨率	电压	0.1mV	0.1mV	1mV	0.1mV	0.1mV	0.1mV
	电流	0.01mA	0.01mA	0.01mA	0.1mA	0.1mA	0.1mA
设定值精度	电压	0.01%+2mV	0.01%+5mV	0.01%+15mV	0.01%+1mV	0.01%+5mV	0.01%+10mV
	电流	0.05%+1mA	0.05%+0.5mA	0.05%+0.1mA	0.05%+6mA	0.05%+2mA	0.05%+1mA
回读值精度	电压	0.02%+5mV	0.02%+12mV	0.02%+25mV	0.02%+2mV	0.02%+5mV	0.02%+12mV
	电流	0.1%+5mA	0.05%+2mA	0.05%+1mA	0.05%+30mA	0.05%+10mA	0.05%+5mA
纹波	电压	3mvp-p	5mvp-p	10mvp-p	3mvp-p	5mvp-p	7mvp-p
	电流	2mA rms	1mA rms	0.5mA rms	15mA rms	7mA rms	4mA rms
电压表精度	0-12V 时, 精度为 0.02%+2mV; 0-50V 时, 精度为 0.02%+5mV						
毫欧表精度	10W 时, 测量 0-1000mΩ 电阻的精度为 0.2%+3mΩ; 测量 1000-10000mΩ 电阻的精度为 0.2%+6mΩ						
工作环境	0-40°C; 0-90% RH						
供电电源	AC 110V/220V±10%; 50/60 Hz						
重量	6.5Kg			28Kg			
尺寸	214mm (W) x 108mm (H) x 365mm (D)			428mm (W) x 103.5mm (H) x 453.5mm (D)			

Features

- Low ripple and low noise.
- High resolution and accuracy (0.1mV/0.01mA).
- Built-in high-accuracy 5 1/2 voltmeter and milliohmmeter.
- Supporting high-accuracy and dynamic programming output.
- High -luminance VFD screen with two lines& four channels display.
- Intelligent fan system fan will be automatically initiated according to the temperature.
- Supporting remote voltage compensation and multidata storage.
- Supporting external trigger input and output.
- Power-on-self-test, software calibration and standard rack mount.
- Communication mode: GPIB/RS232/RS485/USB.



● M8811-M8813

● M8811-M8813 back panel

Model 型号		M8871	M8872	M8873	M8874
Input Rating	Voltage	0-15V	0-30V	0-75V	0-100V
额定输出	Current	0-60A	0-35A	0-15A	0-11A
Load Regulation	Voltage	<0.01%+1mV	<0.01%+1mV	<0.01%+1mV	<0.01%+1mV
	Current	<0.01%+0.1mA	<0.01%+0.1mA	<0.01%+0.1mA	<0.01%+0.1mA
负载调节率	Voltage	0.1mV	0.5mV	2mV	2mV
	Current	1mA	0.5mA	0.2mA	0.2mA
Setting Value Resolution 设定值分辨率	Voltage	0.1mV	0.1mV	0.1mV	1mV
	Current	0.05%+6mA	0.05%+2mA	0.05%+1mA	0.05%+1mA
Readback Value Resolution 回读值分辨率	Voltage	0.03%+3mV	0.03%+5mV	0.03%+15mV	0.03%+25mV
	Current	0.05%+65mA	0.05%+35mA	0.05%+15mA	0.05%+12mA
Readback Value Accuracy 回读值精度	Voltage	4mvp-p	5mvp-p	6mvp-p	8mvp-p
	Current	10mA rms	5mA rms	3mA rms	2.5mA rms
Ripple 纹波					
电压表精度	0-12V Accuracy: 0.02%+2mV; 0-50V Accuracy: 0.02%+5mV				
毫欧表精度	10W 0-1000mΩ Accuracy: 0.2%+3mΩ; 1000-10000mΩ Accuracy: 0.2%+6mΩ				
工作环境	0-40°C; 0-90% RH				
供电电源	AC 100V/120V/220V±10%; 50/60 Hz				
重量	38Kg				
尺寸	583mm (W)*180mm (H)*445mm(D)				



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Maynuo Electronics is dedicated to providing production lines and laboratories with the right test instruments