

# DIGITAL STORAGE & ADJUSTABLE DC POWER SUPPLY

## SSP SERIES



### Features

- . Coded voltage and current adjustment
- . Voltage and current preset function
- . CV/CC auto switching
- . 4-digits voltage and current LED display
- . Output off function
- . Low ripple and noise
- . Output locking function

### Specifications

. Load regulation:	CV $\leq$ 0.01%+3mV	CC $\leq$ 0.1%+10mA
. Line regulation:	CV $\leq$ 0.01%+3mV	CC $\leq$ 0.1%+3mA
. Ripple & noise (20Hz~20MHz):	CV $\leq$ 2mVrms	CC $\leq$ 3mArms
. Voltage resolution:	10mV	
. Current resolution:	1mA	
. Display accuracy (25°C $\pm$ 5°C):	V $\leq$ $\pm$ (0.5%+20mV)	A $\leq$ $\pm$ (0.5%+10mA)
. Temperature coefficient:	V $\leq$ 100ppm+10mV	A $\leq$ 100ppm+5mA
. Response time (10% rated load):	Voltage rise: $\leq$ 100ms, Voltage drop: $\leq$ 100ms	
. Cooling method:	Fan	
. Working temperature:	0~40°C; relative humidity: $\leq$ 85% RH	
. Storage temperature:	0~60°C; relative humidity: $\leq$ 85% RH	
. Dimensions (W×H×D):	100×165×265 mm	
. Working voltage:	AC110V / 220V $\pm$ 10%, 50Hz/60Hz	



SSP305

Model	Voltage Output	Current Output	Weight (kg)
SPP305	0~30V	0~5A	4.5
SPP303	0~30V	0~3A	3.5
SPP183	0~18V	0~3A	2.5

## LSP SERIES



### Features

- . Digital voltage and current adjustment
- . Voltage and current preset function
- . Four sets of preset voltage, current storage and recall function
- . CV/CC auto switching
- . 4-digits voltage and current LED display
- . Output off function & Output locking function
- . Low ripple and noise
- . Over voltage protection (OVP), over current protection (OCP), over heat protection

### Specifications

. Load regulation:	CV $\leq$ 0.01%+3mV	CC $\leq$ 0.1%+10mA
. Line regulation:	CV $\leq$ 0.01%+3mV	CC $\leq$ 0.1%+3mA
. Ripple & noise (20Hz~20MHz):	CV $\leq$ 2mVrms	CC $\leq$ 3mArms
. Voltage resolution:	10mV	
. Current resolution:	1mA	
. Display accuracy (25°C $\pm$ 5°C):	V $\leq$ $\pm$ (0.5%+20mV)	A $\leq$ $\pm$ (0.5%+10mA)
. Temperature coefficient:	V $\leq$ 100ppm+10mV	A $\leq$ 100ppm+5mA
. Response time (10% rated load):	Voltage rise: $\leq$ 100ms, Voltage drop: $\leq$ 100ms	
. Cooling method:	Fan	
. Working temperature:	0~40°C; relative humidity: $\leq$ 85% RH	
. Storage temperature:	0~60°C; relative humidity: $\leq$ 85% RH	
. Dimensions (W×H×D):	100×165×265 mm	
. Working voltage:	AC110V / 220V $\pm$ 10%, 50Hz/60Hz	



LSP305

Model	Voltage Output	Current Output	OVP	OCP	Weight (kg)
LSP305	0~30V	0~5A	0~30V $\pm$ 0.2%FS	0~5A $\pm$ 0.2%FS	4.5
LSP303	0~30V	0~3A	0~30V $\pm$ 0.2%FS	0~3A $\pm$ 0.2%FS	3.5
LSP183	0~18V	0~3A	0~18V $\pm$ 0.2%FS	0~3A $\pm$ 0.2%FS	2.5

# DIGITAL STORAGE & ADJUSTABLE DC SWITCHING POWER SUPPLY

## SKG SERIES

CE NEW

### Features

- . Switching model
- . Coded voltage and current adjustment, fine and coarse
- . Voltage and current preset function
- . CV/CC auto switching
- . 4-digits voltage and current LED display
- . Output off function
- . Output locking function
- . Compact and low cost

### Specifications

. Load regulation:	CV $\leq 0.1\% + 5\text{mV}$	CC $\leq 0.2\% + 5\text{mA}$
. Line regulation:	CV $\leq 0.1\% + 5\text{mV}$	CC $\leq 0.2\% + 3\text{mA}$
. Ripple & noise (20Hz~20MHz):	CV $\leq 10\text{mVrms}$	CC $\leq 5\text{mA rms}$
. Voltage resolution:	10mV	
. Current resolution:	1mA	
. Display accuracy (25°C $\pm 5^\circ\text{C}$ ):	V $\leq \pm(0.5\% + 10\text{mV})$	A $\leq \pm(0.5\% + 10\text{mA})$
. Temperature coefficient:	V $\leq 100\text{ppm} + 10\text{mV}$	A $\leq 100\text{ppm} + 5\text{mA}$
. Response time (10% rated load):	Voltage rise: $\leq 100\text{ms}$ , Voltage drop: $\leq 100\text{ms}$	
. Cooling method:	Fan	
. Working temperature:	0~40°C; relative humidity: $\leq 85\%$ RH	
. Storage temperature:	0~60°C; relative humidity: $\leq 85\%$ RH	
. Dimensions (W×H×D):	103×156×220 mm	
. Working voltage:	AC110V / 220V $\pm 10\%$ , 50Hz/60Hz	



SKG305

Model	Voltage Output	Current Output	Weight (kg)
SKG305	0~32V	0~5A	2
SKG303	0~32V	0~3A	2

## LKG SERIES

CE NEW

### Features

- . Switching model
- . Digital voltage and current adjustment, fine and coarse
- . Voltage and current preset function
- . Four sets of preset voltage, current storage and recall function
- . CV/CC auto switching
- . 4-digits voltage and current LED display
- . Output off function & Output locking function
- . Over voltage protection (OVP), over current protection (OCP), over heat protection
- . Compact and low cost

### Specifications

. Load regulation:	CV $\leq 0.1\% + 5\text{mV}$	CC $\leq 0.2\% + 5\text{mA}$
. Line regulation:	CV $\leq 0.1\% + 5\text{mV}$	CC $\leq 0.2\% + 3\text{mA}$
. Ripple & noise (20Hz~20MHz):	CV $\leq 10\text{mVrms}$	CC $\leq 5\text{mA rms}$
. Voltage resolution:	10mV	
. Current resolution:	1mA	
. Display accuracy (25°C $\pm 5^\circ\text{C}$ ):	V $\leq \pm(0.5\% + 10\text{mV})$	A $\leq \pm(0.5\% + 10\text{mA})$
. Temperature coefficient:	V $\leq 100\text{ppm} + 10\text{mV}$	A $\leq 100\text{ppm} + 5\text{mA}$
. Response time (10% rated load):	Voltage rise: $\leq 100\text{ms}$ , Voltage drop: $\leq 100\text{ms}$	
. Cooling method:	Fan	
. Working temperature:	0~40°C; relative humidity: $\leq 85\%$ RH	
. Storage temperature:	0~60°C; relative humidity: $\leq 85\%$ RH	
. Dimensions (W×H×D):	100×165×265 mm	
. Working voltage:	AC110V / 220V $\pm 10\%$ , 50Hz/60Hz	



LKG305

Model	Voltage Output	Current Output	OVP	OCP	Weight (kg)
LKG305	0~32V	0~5A	0~32V $\pm 0.2\%$ FS	0~5A $\pm 0.2\%$ FS	2
LKG303	0~32V	0~3A	0~32V $\pm 0.2\%$ FS	0~3A $\pm 0.2\%$ FS	2

**CC-1012M**

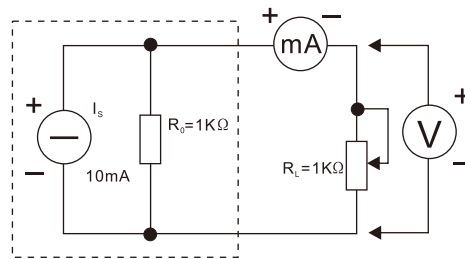


**Purposes**

For some experiment of electronic, a current source is essential. Below there are two samples:

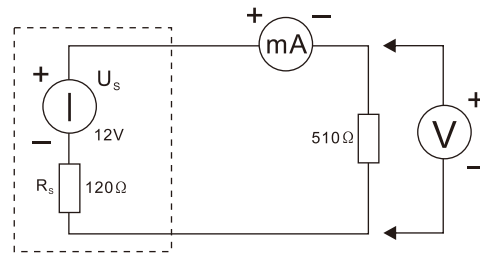
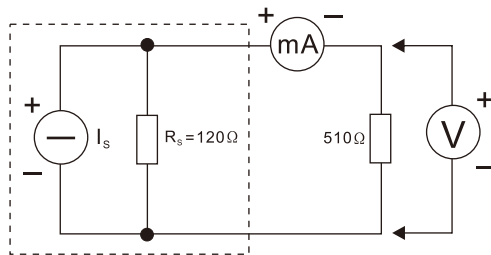
1. Measure the external characteristics of the current source

Adjust the dc current source output to 10mA, set  $R_0$  to 1K ohm and  $\infty$  respectively, and adjust potentiometer  $R_L$  (from 0 to 1K ohm), then measure several pair the voltmeter and ammeter readings and verify the external characteristics.



2. Determine the conditions of equivalent transformation of power source

Record the voltmeter and ammeter values of the voltage source circuit. Adjust the output current  $I_s$  of the current source to make the readings of the two meters equal to the recorded values and verify the correctness of equivalent transformation conditions.



**Features**

- . Constant current output
- . Continuously adjustable output current
- . high stability 0.01%
- . Open circuit and over voltage protection
- . 3 1/2 digit LCD current meter with backlight
- . Compact, light and safety

**Specifications**

- . Output current: 0~10mA
- . Max. Voltage: 12V
- . Resolution: 10uA
- . Load regulation: 0.01%
- . Line regulation: 0.01%
- . Display: 3 1/2 digits LCD with back light
- . Display accuracy: ±1 digit
- . Input voltage: 110V or 220VAC ±10%, 50H or 60Hz
- . Dimension: 115(W) x 100(H) x 130(D) mm
- . Weight: 0.6kg



**CC-1012M**

**CC SERIES**



**CC115**

**CC115**

**Features**

- .Constant current output
- .Continuously adjustable output current
- .Short circuit and over voltage protection
- .3 digits LCD current meter

**Specifications**

- .Output current: 0~1A(3 steps)
- .Max. voltage: 15V
- .Resolution: 100  $\mu$  A(0~20mA)  
1mA(20~200mA)  
10mA(200mA~1A)
- .Load regulation: 1%
- .Line regulation: 1%
- .Display: 3 digits LCD with back light
- .Input voltage: 110~127VAC  $\pm$  10% 60Hz,  
220~240VAC  $\pm$  10% 50Hz switchable
- .Dimensions: 108(W) $\times$ 154(H) $\times$ 240(D) mm
- .Weight: 2kg

**CC225**

**Features**

- .Constant current output
- .Continuously adjustable
- .Short circuit and over voltage protection
- .3 1/2digits LCD current meter

**Specifications**

- .Output current: 0~2A(4 steps)
- .Max. voltage: 25V
- .Resolution: 10  $\mu$  A(0~20mA)  
100  $\mu$  A(20~100~200mA)  
1mA(200mA~2A)
- .Load regulation: 0.2%
- .Line regulation: 0.2%
- .Display: 3 1/2digits LCD with back light
- .Input voltage: 110~127VAC  $\pm$  10% 60Hz  
220~240VAC  $\pm$  10% 50Hz switchable
- .Dimension: 132(W) $\times$ 160(H) $\times$ 270(D) mm
- .Weight: 4kg



**CC225**

## M10-AD350T SERIES



### Features

- . Both AC and DC output (DC regulated)
- . Easy operation
- . DC output over current , AC input fuse protection

### M10-AD350T-5

#### Specifications

- . AC output: 6V/5A, 12V/5A
- . DC output voltage: 6V, 12V
- . DC output current: 5A
- . DC line regulation: 3%
- . DC load regulation: 5%
- . DC ripple voltage: 30mV
- . Input voltage: 220~240VAC  $\pm$  10%, 50Hz or 110~127VAC  $\pm$  10%, 60Hz
- . Dimensions(W×H×D): 150 × 110 × 215 mm
- . Weight: 4.5kg



M10-AD350T-5

### M10-AD350T-10

#### Specifications

- . AC output: 6V/10A, 12V/10A, 24V/5A
- . DC output voltage: 6V, 12V, 24V
- . DC output current: 10A
- . DC line regulation: 3%
- . DC load regulation: 5%
- . DC ripple voltage: 50mV
- . Output accuracy: 2.5%
- . Input voltage: 220~240VAC  $\pm$  10%, 50Hz or 110~127VAC  $\pm$  10%, 60Hz
- . Dimensions(W×H×D): 215 × 120 × 260mm
- . Weight: 6kg



M10-AD350T-10

## M10-AD330M-5

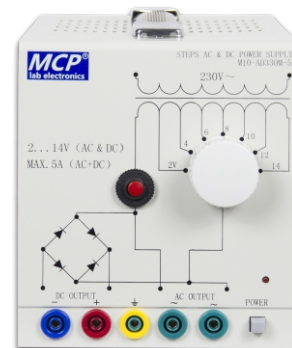


### Features

- . Both AC and DC output (full-wave rectification)
- . Working diagram on panel for easy operation
- . Output 2~14V in 7 steps
- . Over current protection
- . Transformer thermal protection

### Specifications

- . Output voltage: 2V, 4V, 6V, 8V, 10V, 12V, 14V
- . Output current: Max. 5A (AC+DC)
- . Output accuracy: 10%
- . Input voltage: 220~240VAC  $\pm$  10%, 50Hz or 110~127VAC  $\pm$  10%, 60Hz
- . Dimensions (W x H x D): 132 x 160 x 260mm
- . Weight: 3.5kg



M10-AD330M-5

## M10-AD350M SERIES



### Features

- .Both AC and DC output (DC regulated)
- .Output 1~15V in 15steps
- .Over current protection
- .Transformer thermal protection

### Specifications

- .Output voltage: 1V, 2V, 3V, 4V, 5V, 6V, 7V, 8V, 9V, 10V, 11V, 12V, 13V, 14V, 15V
- .DC line regulation: 1%
- .DC load regulation: 1%
- .DC ripple voltage: 3mV
- .Input voltage: 220~240VAC  $\pm$  10%, 50Hz or 110~127VAC  $\pm$  10%, 60Hz
- .Protection: Over current, short-circuit protection



M10-AD350M-10

Model	Output current	Dimensions(W×D×H)	Weight(kg)
M10-AD350M-5	5A	170×160×250mm	5
M10-AD350M-10	10A	170×160×250mm	6.3

## M10-AD360 SERIES



### Features

- .Both AC and DC output (DC unregulated)
- .AC and DC output voltage synchronization
- .LED meters for both voltage and current
- .DC smoothing function

### Specifications

- .Output power: Max.120VA (M10-AD360-2)  
Max.300VA (M10-AD360-5)
- .Display accuracy: Voltmeter  $\pm$  (2.5%Rdg+2digits)  
Ammeter  $\pm$  (2.5%Rdg+2digits)
- .Protection: Over current
- .Input voltage: 220~240VAC  $\pm$  10%, 50Hz or 110~127VAC  $\pm$  10%, 60Hz



M10-AD360-5

Model	Output Voltage	Output Current	Dimensions(W×D×H)	Weight (kg)
M10-AD360-2	0~30V	2A	260×160×260mm	7.5
M10-AD360-5	0~30V	5A	260×160×260mm	10

## M10-AD370



### Features

- .AC and DC combined power supply
- .DC constant voltage and constant current
- .AC output current limited and continuously adjusting
- .AC output over load electronic protection

### Specifications

#### DC output

- .Output voltage: 0~30V
- .Output current: 0~6A
- .Line regulation: CV  $1 \times 10^{-4} + 3\text{mV}$  CC  $2 \times 10^{-3} + 3\text{mA}$
- .Load regulation: CV  $1 \times 10^{-4} + 5\text{mV}$  CC  $2 \times 10^{-3} + 5\text{mA}$
- .Ripple & Noise: CV 1mVrms CC 3mArms
- .Display accuracy: Voltmeter  $\pm(0.2\%Rdg+2\text{digits})$   
Ammeter  $\pm(1.0\%Rdg+2\text{digits})$

#### AC output

- .Output voltage: 0~30V
- .Output current: 0~6A
- .Display accuracy: Voltmeter  $\pm(1.0\%Rdg+2\text{digits})$   
Ammeter  $\pm(1.0\%Rdg+2\text{digits})$
- .Input voltage: 220~240VAC  $\pm 10\%$ , 50Hz or 110~127VAC  $\pm 10\%$ , 60Hz
- .Dimensions: 380(W) $\times$ 140(H) $\times$ 300(D)mm
- .Weight: 12kg



M10-AD370

## M10-AD22 SERIES



### Features

- .AC and DC combined power supply
- .DC constant voltage and constant current
- .AC output over load protection
- .19-inch rack mount (3U) and benchtop
- .Output from front panel and rear panel
- .Temperature controlled fan

### Specifications

#### DC output

- .Line regulation: CV  $1 \times 10^{-4} + 3\text{mV}$  CC  $2 \times 10^{-3} + 3\text{mA}$   
Fixed output 10mV
- .Load regulation: CV  $1 \times 10^{-4} + 5\text{mV}$  CC  $2 \times 10^{-3} + 5\text{mA}$   
Fixed output 10mV
- .Ripple & Noise: CV 1mVrms CC 3mArms  
Fixed output 10mV
- .Fixed output accuracy: 2.5%
- .Display accuracy: Voltmeter  $\pm(0.2\%Rdg+2\text{digits})$   
Ammeter  $\pm(1.0\%Rdg+2\text{digits})$

#### AC output

- .Display accuracy: Voltmeter  $\pm(1.0\%Rdg+2\text{digits})$   
Ammeter  $\pm(1.0\%Rdg+2\text{digits})$
- .Input voltage: 110~127VAC  $\pm 10\%$ , 220~240VAC  $\pm 10\%$  Switchable



M10-AD2210

Model	DC Output Voltage	DC Output Current	AC Output Voltage	AC Output Current	Size	Weight (kg)
M10-AD2205	0~30V,5V	0~5A,3A	0~250V	2.5A	19" 3U	14
M10-AD2210	0~30V,5V	0~5A,3A	0~250V	4.5A	19" 3U	16

## M10-AD3030 SERIES

### Features

- .AC and DC combined power supply
- .DC constant voltage and constant current
- .AC output over load protection
- .19-inch rack mount (3U) and benchtop
- .Temperature controlled fan

### Specifications

#### DC output

- .Line regulation: CV  $6 \times 10^{-4} + 3\text{mV}$  CC  $2 \times 10^{-3} + 3\text{mA}$
- .Load regulation: CV  $3 \times 10^{-3} + 5\text{mV}$  CC  $2 \times 10^{-3} + 5\text{mA}$
- .Ripple & Noise: CV 50mVrms CC 50mArms
- .Display accuracy: Voltmeter  $\pm(1.0\% \text{Rdg} + 2\text{digits})$   
Ammeter  $\pm(1.0\% \text{Rdg} + 2\text{digits})$

#### AC output

- .Display accuracy: Voltmeter  $\pm(1.0\% \text{Rdg} + 2\text{digits})$   
Ammeter  $\pm(1.0\% \text{Rdg} + 2\text{digits})$
- .Input voltage: 110~127VAC  $\pm 10\%$ , 220~240VAC  $\pm 10\%$  Switchable
- .Dimensions: 19" 3U
- .Weight: 22kg

Model	DC Output Voltage	DC Output Current	AC Output Voltage	AC Output Current
M10-AD3030	0~30V	0~30A	0~30V	0~30A
M10-AD3030W	0~30V	0~30A	I 0~30V	I 0~30A
			II 0~250V	II 0~4A



**M10-AD3030W**



**M10-AD3030**



## M10-SS3010



NEW

### Features

- . 600W AC and DC power output
- . AC and DC both constant voltage and constant current
- . AC and DC can be set separately
- . Voltage and current continuous adjust and preset
- . AC power supply sine wave output.
- . Output frequency switchable 50/60Hz and line tracing.
- . Max.output voltage 30V,current 10A both AC and DC
- . Output on/off switching separate for AC and DC
- . Light and compact construction



M10-SS3010

### Specifications

#### DC Output:

Output Voltage:	0~30VDC
Output Current:	0~10A
Voltage resolution:	0.1V
Current resolution:	0.1A
Line regulation:	CV $6 \times 10^{-4} + 3\text{mV}$ CC $2 \times 10^{-3} + 3\text{mA}$
Load regulation:	CV $2 \times 10^{-3} + 5\text{mV}$ CC $2 \times 10^{-3} + 3\text{mA}$
Ripple & noise:	CV 15mVrms CC 15mA rms
Display accuracy:	Voltmeter $\pm(1.0\% \text{Rdg} + 2 \text{digits})$ Ammeter $\pm(1.0\% \text{Rdg} + 2 \text{digits})$

#### AC Output:

Output Voltage:	2~30VAC RMS
Output Current:	0~10A
Voltage resolution:	0.1V
Current resolution:	0.1A
Output frequency:	50Hz, 60Hz (switchable or line tracing)
Output accuracy:	Frequency: 1%
Display accuracy:	Voltmeter $\pm(1.0\% \text{Rdg} + 2 \text{digits})$ Ammeter $\pm(1.0\% \text{Rdg} + 2 \text{digits})$

Input Voltage: 100~127VAC or 220~240VAC, 50Hz/60Hz

Dimensions: 170(W)×160(H)×250(D)mm

Weight: 3kg

# SINGLE OUTPUT ADJUSTABLE DC POWER SUPPLY

## M10-QS SERIES

### Features

- . 16 hours continuously output with full load
- . Over voltage protection
- . Voltage and current preset function
- . USB power output (5V/2A)
- . Constant voltage and constant current
- . Low ripple and noise
- . CV/CC auto switching
- . 3 digits LED display (4 digits LED display is optional)

### Specifications

- .Line regulation: CV  $\leq 5 \times 10^{-4} + 3\text{mV}$  (M10-QS30XX, M10-QS60XX)  $\leq 1 \times 10^{-4} + 3\text{mV}$  (Other models)  
CC  $\leq 4 \times 10^{-3} + 3\text{mA}$  (M10-QS30XX, M10-QS60XX)  $\leq 2 \times 10^{-3} + 3\text{mA}$  (Other models)
- .Load regulation: M10-QS30XX, M10-QS60XX :  
CV  $\leq 5 \times 10^{-4} + 3\text{mV}$  (output current  $\leq 10\text{A}$ )  $\leq 1 \times 10^{-3} + 3\text{mV}$  (output current  $> 10\text{A}$ )  
CC  $\leq 4 \times 10^{-3} + 3\text{mA}$   
Other models :  
CV  $\leq 1 \times 10^{-4} + 3\text{mV}$  (output current  $\leq 3\text{A}$ )  $\leq 2 \times 10^{-4} + 3\text{mV}$  ( $3\text{A} \leq \text{output current} < 10\text{A}$ )  
CC  $\leq 1 \times 10^{-3} + 3\text{mA}$  (output current  $\leq 3\text{A}$ )  $\leq 2 \times 10^{-3} + 3\text{mA}$  ( $3\text{A} \leq \text{output current} < 10\text{A}$ )
- .Ripple & noise: CV 1.5mVrms CC 3mArms
- .Display accuracy:  $\pm (0.5\% \text{Rdg} + 2\text{digits})$
- .Input voltage: 110~127VAC  $\pm 10\%$  60Hz, 220~240  $\pm 10\%$  50Hz Switchable

Model	Voltage	Current	Voltage preset	Current preset	Over voltage protection	Dimensions (W×H×D)	Weight (kg)
M10-QS302	0~30V	0~2A	Yes			130×165×305 mm	5
M10-QS303	0~30V	0~3A	Yes			130×165×305 mm	5
M10-QS305	0~30V	0~5A	Yes			130×165×325 mm	6
M10-QS603	0~60V	0~3A	Yes			130×165×305 mm	5
M10-QS1001	0~100V	0~1A	Yes			130×165×305 mm	5.5
M10-QS3010	0~30V	0~10A	Yes	Yes	Yes	255×155×320 mm	9
M10-QS3020	0~30V	0~20A	Yes	Yes	Yes	255×155×320 mm	9
M10-QS605	0~60V	0~5A	Yes	Yes	Yes	255×155×320 mm	11.5
M10-QS6010	0~60V	0~10A	Yes	Yes	Yes	255×155×320 mm	15
M10-QS1003	0~100V	0~3A	Yes	Yes	Yes	255×155×320 mm	9
M10-QS1005	0~100V	0~5A	Yes	Yes	Yes	255×155×320 mm	14
M10-QS2001	0~200V	0~1A	Yes	Yes	Yes	255×155×320 mm	7
M10-QS2003	0~200V	0~3A	Yes	Yes	Yes	255×155×320 mm	15
M10-QS3030	0~30V	0~30A	Yes	Yes	Yes	255×155×480 mm	18
M10-QS6020	0~60V	0~20A	Yes	Yes	Yes	255×155×480 mm	20
M10-QS2005	0~200V	0~5A	Yes	Yes	Yes	255×155×480 mm	18



M10-QS305



M10-QS3010

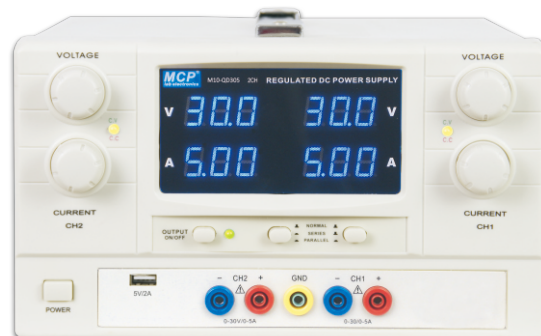
# DUAL OUTPUT ADJUSTABLE DC POWER SUPPLY

## M10-QD SERIES



### Features

- . Output off function, voltage preset function
- . Dual independent adjustable DC outputs
- . USB power output (5V/2A)
- . Independent, series and parallel variety output
- . Constant voltage and constant current
- . Low ripple and noise
- . Four LED displays with 3 digits, selectable for two sets output voltage and current display simultaneously
- . 16 hours continuous output with full load
- . Auto tracking output



**M10-QD305**

### Specifications

- . Line regulation: CV  $\leq 5 \times 10^{-4} + 3\text{mV}$  (M10-QD30XX, M10-QD60XX)  $\leq 1 \times 10^{-4} + 3\text{mV}$  (Other models)  
CC  $\leq 4 \times 10^{-3} + 3\text{mA}$  (M10-QD30XX, M10-QD60XX)  $\leq 2 \times 10^{-3} + 3\text{mA}$  (Other models)
- . Load regulation: M10-QS30XX, M10-QS60XX :  
CV  $\leq 5 \times 10^{-4} + 3\text{mV}$  (output current  $\leq 10\text{A}$ )  $\leq 1 \times 10^{-3} + 3\text{mV}$  (output current  $> 10\text{A}$ )  
CC  $\leq 4 \times 10^{-3} + 3\text{mA}$   
Other models :  
CV  $\leq 1 \times 10^{-4} + 3\text{mV}$  (output current  $\leq 3\text{A}$ )  $\leq 2 \times 10^{-4} + 3\text{mV}$  ( $3\text{A} \leq \text{output current} < 10\text{A}$ )  
CC  $\leq 1 \times 10^{-3} + 3\text{mA}$  (output current  $\leq 3\text{A}$ )  $\leq 2 \times 10^{-3} + 3\text{mA}$  ( $3\text{A} \leq \text{output current} < 10\text{A}$ )
- . Ripple & noise: CV 1.5mVrms CC 3mArms
- . Display accuracy:  $\pm (0.5\% \text{Rdg} + 2 \text{digits})$
- . Input voltage: 110~127VAC  $\pm 10\%$  60Hz, 220~240  $\pm 10\%$  50Hz Switchable

Model	Independent Output	Series Output	Parallel Output	Dimensions (W×H×D)	Weight (kg)
M10-QD302	CH1 0~30V/0~2A CH2 0~30V/0~2A	CH1+CH2 0~60V/0~2A	CH1//CH2 0~30V/0~4A	255 × 155 × 320 mm	9
M10-QD303	CH1 0~30V/0~3A CH2 0~30V/0~3A	CH1+CH2 0~60V/0~3A	CH1//CH2 0~30V/0~6A	255 × 155 × 320 mm	9
M10-QD305	CH1 0~30V/0~5A CH2 0~30V/0~5A	CH1+CH2 0~60V/0~5A	CH1//CH2 0~30V/0~10A	255 × 155 × 320 mm	9
M10-QD3010	CH1 0~30V/0~10A CH2 0~30V/0~10A	CH1+CH2 0~60V/0~10A	CH1//CH2 0~30V/0~20A	255 × 155 × 480 mm	12
M10-QD3020	CH1 0~30V/0~20A CH2 0~30V/0~20A	CH1+CH2 0~60V/0~20A	CH1//CH2 0~30V/0~40A	255 × 155 × 480 mm	16
M10-QD6010	CH1 0~60V/0~10A CH2 0~60V/0~10A	CH1+CH2 0~120V/0~10A	CH1//CH2 0~60V/0~20A	255 × 155 × 480 mm	16

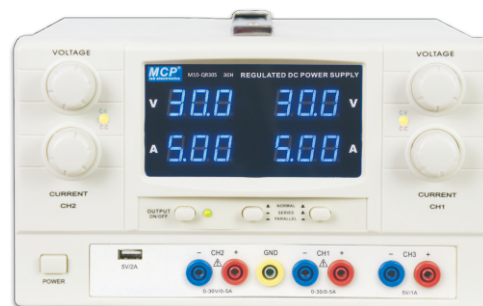
# TRIPLE & QUAD OUTPUT ADJUSTABLE DC POWER SUPPLY

## M10-QR SERIES



### Features

- Output off function, voltage preset function
- Triple independent DC outputs. Two adjustable and one fixed output
- USB power output (5V/2A)
- Independent, series and parallel variety output
- Constant voltage and constant current
- Low ripple and noise
- Four LED displays with 3 digits, selectable for two sets output voltage and current display simultaneously
- 16 hours continuous output with full load
- Auto tracking output



**M10-QR305**

### Specifications

· Line regulation:	CV $1 \times 10^{-4} + 3\text{mV}$	CC $2 \times 10^{-3} + 3\text{mA}$ (CH1, CH2)	5mV (Fixed output)
· Load regulation:	CV $1 \times 10^{-4} + 3\text{mV}$	CC $2 \times 10^{-3} + 3\text{mA}$ (CH1, CH2)	15mV (Fixed output)
· Ripple & noise:	CV 1mVrms	CC 3mArms (CH1, CH2)	2mVrms (Fixed output)
· Display accuracy:	$\pm (0.5\% \text{Rdg} + 2\text{digits})$		
· Input voltage:	110~127VAC $\pm 10\%$ 60Hz, 220~240 $\pm 10\%$ 50Hz		Switchable

Model	Independent Output	Series Output	Parallel Output	Dimensions (W×H×D)	Weight (kg)
M10-QR302	CH1 0~30V/0~2A CH2 0~30V/0~2A CH3 5V/3A	CH1+CH2 0~60V/0~2A	CH1//CH2 0~30V/0~4A	250×135×300 mm	8.2
M10-QR303	CH1 0~30V/0~3A CH2 0~30V/0~3A CH3 5V/3A	CH1+CH2 0~60V/0~3A	CH1//CH2 0~30V/0~6A	250×135×300 mm	8.2
M10-QR305	CH1 0~30V/0~5A CH2 0~30V/0~5A CH3 5V/3A	CH1+CH2 0~60V/0~5A	CH1//CH2 0~30V/0~10A	250×135×300 mm	9

## M10-QP SERIES



### Features

- Output off function, CH1 and CH2 voltage preset function
- Quad independent DC outputs
- USB power output (5V/2A)
- Independent, series and parallel variety output
- Constant voltage and constant current
- Low ripple and noise
- Plastic panel
- Four LED displays with 3 digits, selectable for two sets output voltage and current display simultaneously



**M10-QP305**

### Specifications

· Line regulation:	CV $1 \times 10^{-4} + 3\text{mV}$	CC $2 \times 10^{-3} + 3\text{mA}$ (CH1, CH2)	5mV (CH3, CH4)
· Load regulation:	CV $1 \times 10^{-4} + 3\text{mV}$	CC $2 \times 10^{-3} + 3\text{mA}$ (CH1, CH2)	15mV (CH3, CH4)
· Ripple & noise:	CV 1mVrms	CC 3mArms (CH1, CH2)	2mVrms (CH3, CH4)
· Display accuracy:	$\pm (0.5\% \text{Rdg} + 2\text{digits})$		
· Input voltage:	110~127VAC $\pm 10\%$ 60Hz, 220~240 $\pm 10\%$ 50Hz		Switchable

Model	Independent Output	Series Output	Parallel Output	Dimensions (W×H×D)	Weight (kg)
M10-QP303	CH1 0~30V/0~3A CH2 0~30V/0~3A CH3 3~6.5V/3A CH4 8~15V/1A	CH1+CH2 0~60V/0~3A CH3 3~6.5V/3A CH4 8~15V/1A	CH1//CH2 0~30V/0~6A CH3 3~6.5V/3A CH4 8~15V/1A	260×160×310mm	8.5
M10-QP305	CH1 0~30V/0~5A CH2 0~30V/0~5A CH3 3~6.5V/3A CH4 8~15V/1A	CH1+CH2 0~60V/0~5A CH3 3~6.5V/3A CH4 8~15V/1A	CH1//CH2 0~30V/0~10A CH3 3~6.5V/3A CH4 8~15V/1A	260×160×310mm	9.5

## M10-QP500E



### Features

- . Quad independent DC outputs
- . High voltage output (500V)
- . LED voltage display
- . Low ripple and noise

### Specifications

- |                      |   |
|----------------------|---|
| . Input voltage:     | 100~127VAC ± 10%, 220~240VAC ± 10%  |
| . Output voltage:    | CH1 0~500V, CH2 0~50V, CH3 0~8V, CH4 0~12V  |
| . Output current:    | CH1 Max. 50mA, CH2 Max. 50mA, CH3 Max. 3A, CH4 Max. 4A  |
| . Line regulation:   | CH1 $1 \times 10^{-4} + 100\text{mV}$ , CH2 $1 \times 10^{-3} + 10\text{mV}$<br>CH3 $1 \times 10^{-3} + 10\text{mV}$ , CH4 $1 \times 10^{-3} + 10\text{mV}$ |
| . Load regulation:   | CH1 $1 \times 10^{-4} + 100\text{mV}$ , CH2 $1 \times 10^{-3} + 10\text{mV}$<br>CH3 $1 \times 10^{-3} + 30\text{mV}$ , CH4 $1 \times 10^{-3} + 30\text{mV}$ |
| . Ripple and noise:  | CH1 20mV rms, CH2&CH3&CH4 5mV   |
| . Protection:        | Current-limit   |
| . Display accuracy:  | ±(1%Rdg+2digits)  |
| . Dimensions(W×H×D): | 260×160×340mm   |
| . Weight:            | 5kg   |



M10-QP500E

## M10-QP500A



### Features

- . Quad independent DC outputs
- . High voltage output (500V)
- . Analog meter voltage display
- . Low ripple and noise

### Specifications

- |                      |   |
|----------------------|---|
| . Input voltage:     | 100~127VAC ± 10%, 220~240VAC ± 10%  |
| . Output voltage:    | CH1 0~500V, CH2 0~50V, CH3 0~8V, CH4 0~12V  |
| . Output current:    | CH1 Max. 50mA, CH2 Max. 50mA, CH3 Max. 3A, CH4 Max. 4A  |
| . Line regulation:   | CH1 $1 \times 10^{-4} + 100\text{mV}$ , CH2 $1 \times 10^{-3} + 10\text{mV}$<br>CH3 $1 \times 10^{-3} + 10\text{mV}$ , CH4 $1 \times 10^{-3} + 10\text{mV}$ |
| . Load regulation:   | CH1 $1 \times 10^{-4} + 100\text{mV}$ , CH2 $1 \times 10^{-3} + 10\text{mV}$<br>CH3 $1 \times 10^{-3} + 30\text{mV}$ , CH4 $1 \times 10^{-3} + 30\text{mV}$ |
| . Ripple and noise:  | CH1 20mV rms, CH2&CH3&CH4 5mV   |
| . Protection:        | Current-limit   |
| . Display accuracy:  | ±2.5%   |
| . Dimensions(W×H×D): | 260×160×340mm   |
| . Weight:            | 5kg   |



M10-QP500A

## M10-QP100



### Features

- .Quad independent DC outputs
- .Two adjustable outputs and two fixed outputs
- .Two LED to indicate the adjustable outputs' voltage
- .Three symmetric outputs
- .Over current protection on each output

### Specifications

#### .Output1:

- .Output Voltage: 0~30V
- .Output Current: Max. 5A
- .Line Regulation: 0.01%+3mV
- .Load Regulation : 0.01%+4mV
- .Ripple & Noise: 1mV
- .Display Accuracy: Voltmeter  $\pm(0.2\%Rdg+2digits)$

#### .Output2:

- .Output Voltage: 0~ $\pm 15V$
- .Output Current: Max. 500mA
- .Line Regulation: 0.01%+3mV
- .Load Regulation : 0.01%+4mV
- .Ripple & Noise: 1mV
- .Display Accuracy: Voltmeter  $\pm(0.2\%Rdg+2digits)$

- .Input Voltage: 110~127VAC $\pm 10\%$  60Hz, 220~240VAC $\pm 10\%$  50Hz, Switchable
- .Dimensions: 260(W) $\times$ 160(H) $\times$ 340(D)mm
- .Weight: 8kg



M10-QP100

#### .Output3:

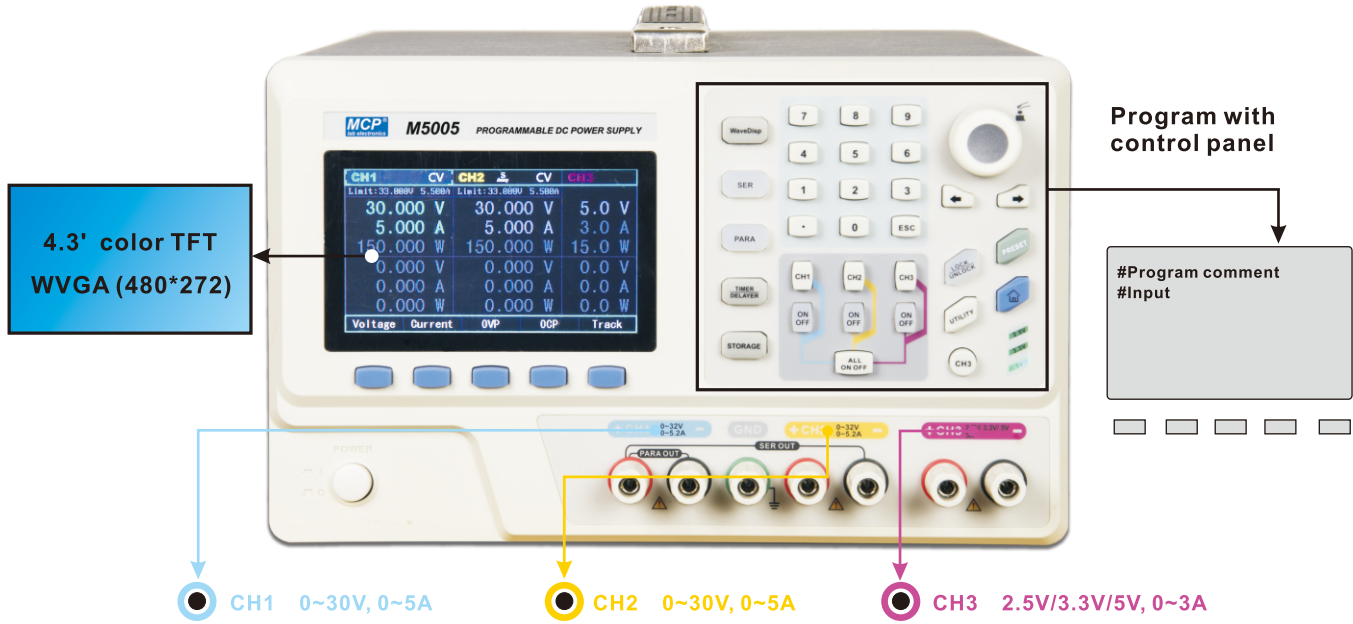
- .Output Voltage:  $\pm 15V$
- .Output Current: Max. 1A
- .Line Regulation: 1%
- .Load Regulation : 1%
- .Ripple & Noise: 5mV

#### .Output4:

- .Output Voltage:  $\pm 5V$
- .Output Current: Max. 1A
- .Line Regulation: 1%
- .Load Regulation : 1.5%
- .Ripple & Noise: 2.5mV

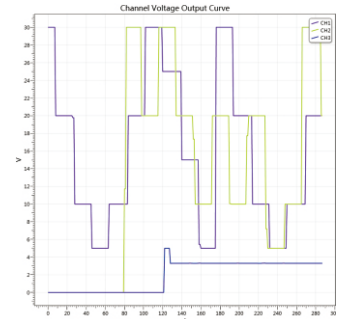
# M5000 SERIES PROGRAMMABLE DC POWER SUPPLY

## M5000 SERIES PROGRAMMABLE DC POWER SUPPLY

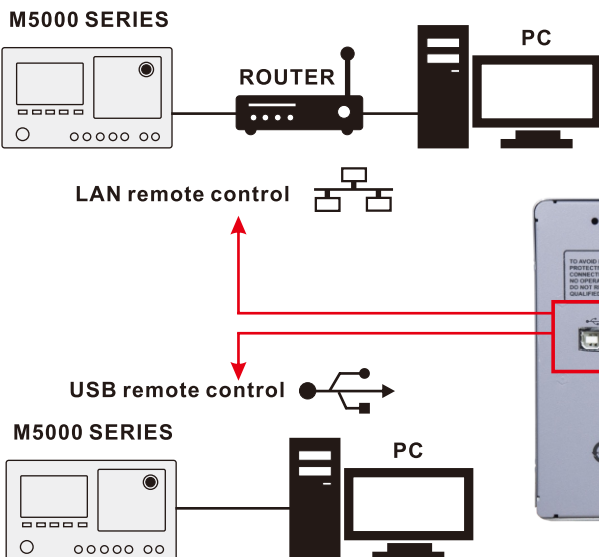


CH1	CH2	CH3
30.000	30.000	5.000
5.000	5.000	3.000
150.000	150.000	15.000
0.000	0.000	0.000
0.000	0.000	0.000
0.000	0.000	0.000

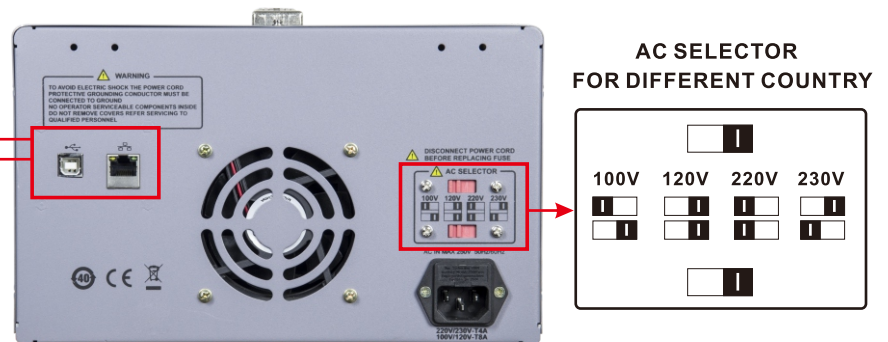
**MAIN CONTROL PANEL**



**OUTPUT CURVE RECORD**



### BACK VIEW



# M5000 SERIES PROGRAMMABLE DC POWER SUPPLY

## M5000 SERIES



### Features

- . 4.3" TFT color display, WVGA (480\*272)
- . Graphical user menu
- . Two independent channels 0~30V/0~3,0~5A
- . Fixed voltage output 2.5V,3.3V,5V/3A
- . High output resolution 1mV/1mA
- . Low ripple noise
- . Over voltage, over current and over heat protection



**M5005**

M5000 Series Technical Data			M5003	M5005
Output	Voltage		CH1&CH2: 0~30V CH3: 2.5V/3.3V/5V	CH1&CH2: 0~30V CH3: 2.5V/3.3V/5V
	Current		CH1&CH2: 0~3A×2 CH3: 0~3A	CH1&CH2: 0~5A×2 CH3: 0~3A
CV mode	Regulation	source	≤0.01%+2mV	
		load	≤0.01%+2mV	
	Ripple & noise		≤1.0mVrms/350 μVrms (5Hz~1MHz)	
	Response time		≤50 μs(50% load change & min. load 0.5A)	
	Order processing time		<100ms	
	Output range		0 to set voltage continuously adjustable	
CC mode	Regulation	source	≤0.01%+250 μA	
		load	≤0.01%+250 μA	
	Ripple current		≤2mArms	
	Output range		0 to set voltage continuously adjustable	
Trace mode	Parallel	source regulation	≤0.01%+2mV	
		load regulation	≤0.01%+2mV	
	Series	source regulation	≤0.01%+3mV	
		load regulation	≤300mV	
	Tracking error	≤0.5%+100mV(with load +300mV)		
Measurement	Display	voltage full range	5 digits	
		current full range	4 digits	
	Programming resolution	voltage	1mV	
		current	1mA	
	Read back resolution	voltage	0.1mV	
		current	0.1mA	
	Display resolution	voltage	1mV	
		current	1mA	
	Programming accuracy (25±5°C)	voltage	±(0.05%+10mV)	
current		±(0.2%+10mA)		
Reading accuracy (25±5°C)	voltage	±(0.05%+5mV)		
	current	±(0.15%+5mA)		
Voltage programming time	CH1		UP: FL<50ms,NL<30ms	DOWN: FL<45ms,NL<400ms
	CH2		UP: FL<50ms,NL<30ms	DOWN: FL<45ms,NL<400ms
	CH3		UP: FL<15ms,NL<13ms	DOWN: FL<20ms,NL<100ms
Temperature coefficient per°C	CH1	voltage full range	0.01%+5mV	
		current full range	0.01%+2mA	
	CH2	voltage	0.01%+5mV	
		current	0.01%+2mA	
	CH3	voltage	0.01%+2mV	
		current	0.01%+2mA	
Channel 3	output voltage		2.5V/3.3V/5V±8%	
	output current		0~3A	
	Regulation	source	≤0.01%+3mV	
		load	≤0.01%+3mV	
	Ripple & noise	≤1.0mVrms (5Hz~1MHz)		
Interface	USB Host & Device			
Power Source	AC 100V~240V, 50Hz/60Hz			
Weight	8kg		9.5kg	
Dimension (W×H×D)	260mm×270mm×300mm			



## M30-SP & TP & YP SERIES



### Features

#### .Output off function

- .Constant voltage and constant current
- .Aluminium alloy panel
- .Series and parallel tracking function (M30-TP Series)
- .One adjustable output & two fixed outputs (M30-YP Series)

### Specifications

- .Line regulation: CV  $1 \times 10^{-4} + 3\text{mV}$  CC  $2 \times 10^{-3} + 3\text{mA}$   
Fixed output 10mV (M30-TP Series)  
Fixed output 1% (M30-YP Series)
- .Load regulation: CV  $1 \times 10^{-4} + 4\text{mV}$  CC  $2 \times 10^{-3} + 5\text{mA}$   
Fixed output 10mV (M30-TP Series)  
Fixed output 1% (M30-YP Series)
- .Ripple & noise: CV 1mVrms CC 3mArms  
Fixed output 10mV (M30-TP & YP Series)
- .Fixed Output accuracy: 2.5% (M30-TP & YP Series)
- .Display accuracy: Voltmeter  $\pm (0.2\% \text{Rdg} + 2\text{digits})$   
Ammeter  $\pm (1.0\% \text{Rdg} + 2\text{digits})$
- .Input voltage: 110~127VAC  $\pm 10\%$  60Hz, 220~240  $\pm 10\%$  50Hz  
Switchable



**M30-SP305E**



**M30-YP305E**



**M30-TP305E**

Model	Voltage	Current	Dimensions(W × H × D)	Weight
M30-SP202E	0~20V	0~2A	132×160×270mm	5kg
M30-SP303E	0~30V	0~3A	132×160×270mm	5kg
M30-SP305E	0~30V	0~5A	132×160×270mm	6kg

Model	Voltage	Current	Dimensions(W × H × D)	Weight
M30-TP202E	0~20V×2 5V	0~2A×2 3A	260×160×340mm	10kg
M30-TP303E	0~30V×2 5V	0~3A×2 3A	260×160×340mm	10kg
M30-TP305E	0~30V×2 5V	0~5A×2 3A	260×160×340mm	12kg

Model	Output 1	Output 2	Output 3	Dimensions(W × H × D)	Weight
M30-YP202E	0~20V 0~2A	12V 500mA	5V 500mA	170×160×250mm	6kg
M30-YP303E	0~30V 0~3A	12V 500mA	5V 500mA	170×160×250mm	6kg
M30-YP305E	0~30V 0~5A	12V 500mA	5V 500mA	170×160×250mm	7kg

## M50 SERIES PROGRAMMABLE DC POWER SUPPLY

M50 series are easy-use programmable linear DC power supply, upgrading from M10 and M30 series classical power supply.

The panel setting is same as most linear DC power supply, no any number key and no more function key. As well as having M10,M30 series features, they have timed outputs of voltage and current, a compact and clear user interface with PC and a standard USB, so the programming become a very simple work.

M50 series programmable DC power supply meet the requirements of various forms desktop and integrated system testing.

They are widely used in research and development, education, training, industrial control, mobile communication, and product testing, debug etc.

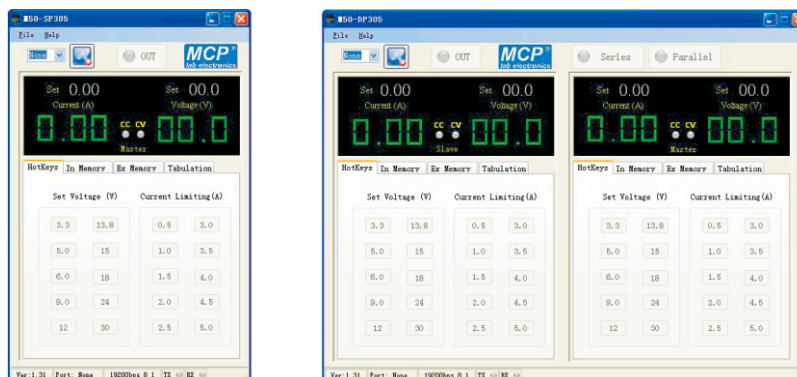


### Advanced functions

Panel setting:



PC software interface:



# M50 SERIES PROGRAMMABLE DC POWER SUPPLY

## M50-SP SINGLE PROGRAMMABLE DC POWER SUPPLY



### Features

- .Single output
- .Output off function
- .LED digit display and setting
- .Standard interface USB
- .Constant voltage and constant current
- .Aluminium alloy panel



**M50-SP305E**

### Specifications

- .Line regulation: CV  $1 \times 10^{-4} + 3\text{mV}$  CC  $2 \times 10^{-3} + 3\text{mA}$
- .Load regulation: CV  $1 \times 10^{-4} + 4\text{mV}$  CC  $2 \times 10^{-3} + 5\text{mA}$
- .Ripple & noise: CV 3mVrms CC 3mArms
- .Display accuracy: Voltmeter  $\pm (0.2\% \text{Rdg} + 2\text{digits})$   
Ammeter  $\pm (1.0\% \text{Rdg} + 2\text{digits})$
- .Input voltage: 110~127VAC  $\pm 10\%$  60Hz, 220~240  $\pm 10\%$  50Hz  
Switchable

Model	Voltage	Current	Dimensions(W × H × D)	Weight
M50-SP202E	0~20V	0~2A	132 × 160 × 270mm	5kg
M50-SP303E	0~30V	0~3A	132 × 160 × 270mm	5kg
M50-SP305E	0~30V	0~5A	132 × 160 × 270mm	6kg



**PC software control**

## M50-YP MULTI-OUTPUTS PROGRAMMABLE DC POWER SUPPLY



### Features

- .One adjustable output and two fixed outputs
- .Output off function
- .LED digit display and setting
- .Standard interface USB
- .Constant voltage and constant current
- .Aluminium alloy panel



**M50-YP305E**

### Specifications

- .Line regulation: CV  $1 \times 10^{-4} + 3\text{mV}$  CC  $2 \times 10^{-3} + 3\text{mA}$   
Fixed output 1%
- .Load regulation: CV  $1 \times 10^{-4} + 4\text{mV}$  CC  $2 \times 10^{-3} + 5\text{mA}$   
Fixed output 1%
- .Ripple & noise: CV 3mVrms CC 3mArms  
Fixed output 10mV
- .Fixed output accuracy: 2.5%
- .Display accuracy: Voltmeter  $\pm (0.2\% \text{Rdg} + 2\text{digits})$   
Ammeter  $\pm (1.0\% \text{Rdg} + 2\text{digits})$
- .Input voltage: 110~127VAC  $\pm 10\%$  60Hz, 220~240  $\pm 10\%$  50Hz  
Switchable

Model	Output 1	Output 2	Output 3	Dimensions(W × H × D)	Weight
M50-YP202E	0~20V 0~2A	12V 500mA	5V 500mA	170×160×250mm	6kg
M50-YP303E	0~30V 0~3A	12V 500mA	5V 500mA	170×160×250mm	6kg
M50-YP305E	0~30V 0~5A	12V 500mA	5V 500mA	170×160×250mm	7kg



**PC software control**

## M50-TP TRIPLE-OUTPUTS PROGRAMMABLE DC POWER SUPPLY CE

### Features

- .Two adjustable outputs and one fixed output
- .Output off function
- .LED digit for display and setting
- .Standard interface USB
- .Constant voltage and constant current
- .Aluminium alloy panel

### Specifications

- .Line regulation:            CV  $1 \times 10^{-4} + 3\text{mV}$     CC  $2 \times 10^{-3} + 3\text{mA}$   
Fixed output 10mV
- .Load regulation:        CV  $1 \times 10^{-4} + 4\text{mV}$     CC  $2 \times 10^{-3} + 5\text{mA}$   
Fixed output 10mV
- .Ripple & noise:        CV 3mVrms            CC 3mArms  
Fixed output 10mV
- .Fixed output accuracy: 2.5%
- .Display accuracy:      Voltmeter  $\pm (0.2\% \text{Rdg} + 2\text{digits})$   
Ammeter  $\pm (1.0\% \text{Rdg} + 2\text{digits})$
- .Input voltage:         110~127VAC  $\pm 10\%$  60Hz, 220~240  $\pm 10\%$  50Hz  
Switchable



**M50-TP305E**

Model	Voltage	Current	Dimensions(W × H × D)	Weight
M50-TP202E	0~20V × 2 5V	0~2A × 2 3A	260 × 160 × 340mm	10kg
M50-TP303E	0~30V × 2 5V	0~3A × 2 3A	260 × 160 × 340mm	10kg
M50-TP305E	0~30V × 2 5V	0~5A × 2 3A	260 × 160 × 340mm	12kg



**PC software control**