

MP SERIES

High performance programmable DC test power supply

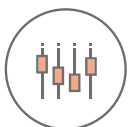
The MP series programmable DC power supply is characterized by fast dynamic response, high output accuracy, and low output ripple. The international standard 3U chassis is adopted to provide up to 15kW power output capacity. The power supply is provided with a wide range output capacity of automatic range and flexible output capacity of high voltage, low current, or low voltage and high current. Supporting powerful arbitrary waveform generator, providing more comprehensive power supply test capability. It is especially applicable to various test system integration, test benches, laboratories, production lines, and other occasions, as well as military industry, scientific research institutes, or maintenance organizations.



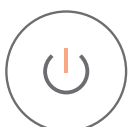
⚡ Features

- > Automatic range, wide range constant power output;
- > Output voltage: 0~80V to 0~2250V;
- > Output current: 0~20A to 0~510A, parallel connection can be extended to 5100A;
- > Output power: 0~5kW to 0~15kW, extended to 150kW in parallel;
- > Adopt active power factor correction technology; the power factor is as high as 0.99;
- > High output accuracy: <0.1% Vmax, <0.2% Imax;
- > Fast dynamic response: <2ms, low output ripple: <0.03% Vrms; Automatic conversion of three working modes: constant voltage, constant current, and constant power;
- > Arbitrary waveform generator with multiple waveform edit modes, built-in multiple independent curves, providing users with accurate test waveforms;
- > Support multiple remote control, standard port: CAN, RS485/ 232, LAN; optional port: USB, analog control;
- > Supporting WOCEN POWER CONTROL remote control software;
- > Support the internal (external) discharge module with a maximum discharge power of up to 3kW.

Product Application



Automotive
Electronics Testing



Power Test



Battery Test



Automated Test Systems
(ATE)
DC Switch Test



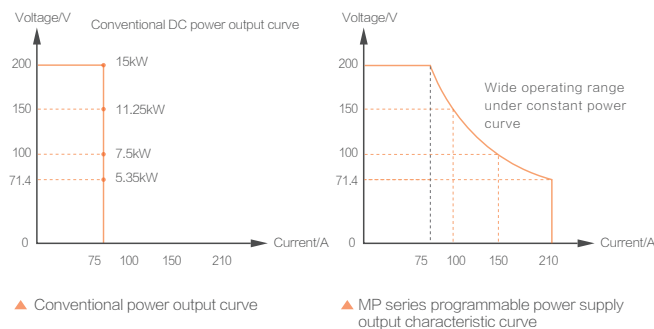
Energy Storage
System



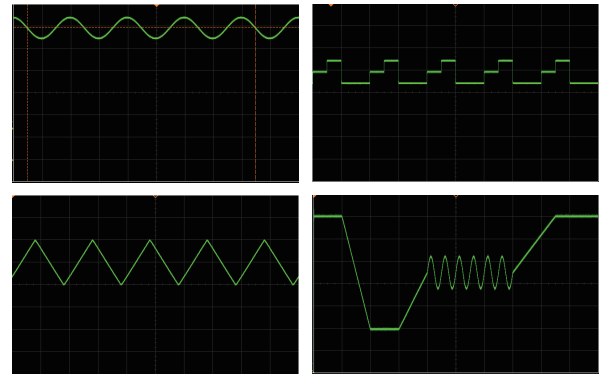
Precision
Plating/Sputtering

⚡ Wide range output capability with automatic range ⚡ Powerful Arbitrary Waveform Generator

Compared to traditional Fixed range DC power supplies, the MP series can output full power across a wide range of voltage and current combinations within its power range. A single MP power supply covers the output range of three traditional power supplies. For example, the 200V/210A/15kW model of the MP series power supply can provide an output of 200V/75A or 71.4V/210A and can offer a full power output of 15kW at any voltage point between 71.4V and 200V, significantly improving the output power supply capability of the product and significantly reducing the complexity and space occupied by the system setup.

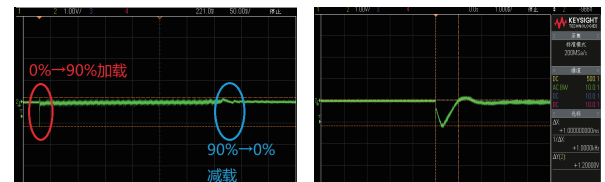


The MP series built-in multiple waveform generators allow users to easily realize the single or combined output of triangular/rectangular/trapezoidal/sine/ step waveforms and apply these waveforms to an output voltage or output current. They provide users with powerful programmable test capability.



⚡ Fast Dynamic Response

With advanced multi-loop composite control technology, MP series provides fast dynamic response capability, instantaneous load voltage drop <1%, almost no voltage process during unloading, and dynamic response time <2ms.



⚡ WOCEN POWER CONTROL upper computer monitoring software

- WOCEN POWER CONTROL is a newly developed Windows monitoring software platform;
- Automatic equipment scanning, supports simultaneous monitoring of multiple different lower computers, multi-threaded control, and no mutual influence;
- Supports output parameter display/setting, start/stop control, protection parameter configuration, status indication function generator, and provides 100-step arbitrary waveform editing capabilities;
- Data storage, providing storage of user configuration, function generator editing data, and real-time output data;
- Storage and call function, supports user-defined storage path, storage time interval, etc.
- Supports RS232, RS485, USB, LAN network port control;
- Supports MP (V1.2), HB, GP-1.5/3kW series products (continuously updated)



 Specification and Models

Model	Voltage	Current	Power	Size
MP-001.5-80	80V	60A	1.5kW	2U
MP-003-80	80V	120A	3kW	2U
MP-001.5-750	750V	6A	1.5kW	2U
MP-003-750	750V	12A	3kW	2U
MP-003-1500	1500V	6A	3kW	2U
MP-005-80	80V	170A	5kW	3U
MP-010-80	80V	340A	10kW	3U
MP-015-80	80V	510A	15kW	3U
MP-005-200	200V	70A	5kW	3U
MP-010-200	200V	140A	10kW	3U
MP-015-200	200V	210A	15kW	3U
MP-005-360	360V	40A	5kW	3U
MP-010-360	360V	80A	10kW	3U
MP-015-360	360V	120A	15kW	3U
MP-005-500	500V	30A	5kW	3U
MP-010-500	500V	60A	10kW	3U
MP-015-500	500V	90A	15kW	3U
MP-005-750	750V	20A	5kW	3U
MP-010-750	750V	40A	10kW	3U
MP-015-750	750V	60A	15kW	3U
MP-010-1000	1000V	30A	10kW	3U
MP-015-1000	1000V	40A	15kW	3U
MP-015-1500	1500V	30A	15kW	3U
MP-015-1500	1500V	40A	15kW	3U
MP-015-2250	2250V	25A	15kW	3U

⚡ Technical Parameters

Input	Number of phases	3-phase 3-wire +PE(single-phase input for <3kW models)
	Voltage	342~460VAC(AC220V input for <3kW models)
	Frequency	45~65Hz
Display Mode		4.3" color LCD
Voltage resolution		0.01V/0.001V
Current resolution		0.01A/0.001A
Power resolution		0.001kW/0.0001kW
Set accuracy ①	Voltage	$\leq 0.1\%U_{max}$
	Current	$\leq 0.2\%I_{max}$
Measurement accuracy②	Voltage	$\leq 0.1\%U_{max}$
	Current	$\leq 0.2\%I_{max}$
Load effect	Voltage	$\leq 0.05\%U_{max}$
	Current	$\leq 0.15\%I_{max}$
Source Effect	Voltage	$\leq 0.02\%U_{max}$
	Current	$\leq 0.05\%I_{max}$
Load Response Time ③		$\leq 2ms$
10%~90% Rise Time		30ms
Temperature Drift	Voltage	0.05% Set Value
	Current	0.05% Set Value
Noise		$\leq 65dB$ (A)
Overvoltage protection		0 to 110% U_{max} adjustable
Maximum lead pressure drop compensation		30V(1500V power supply)
Output discharge time		Less than 1S(when equipped with energy absorption unit)
Digital communication interface		Standard port:CAN, RS485/232+LAN Remote port:① USB, RS485+ analog ②USB, RS232+ analog ③USB, LAN+ analog ④USB, CAN+ analog
Analog programming interface		Start, stop, alarm, 0~5V or 0~10V analog control output
Protection and Alarm		Module fault alarm (including input voltage abnormality protection, DC bus voltage abnormality protection, internal overcurrent protection, short circuit protection, etc.), output overvoltage alarm (software + hardware), overcurrent protection, internal overheating alarm, output wire compensation fault alarm
Cooling method		Temperature controlled forced air cooling
Parallel operation		Support a maximum of 10 parallel nodes in master/slave mode
Operating temperature		0~40°C
Storage Temperature		-20~70°C
Humidity		<80% no condensation
Overall Dimension(W×H×D)		19"standard chassis 3U height, 482x132.5x650mm(bare)482x132.5x742.5mm(Max)
Weight		18kg(5kW)、26kg(10kW)、33kg(15kW)
Remark		1. Set the test condition of accuracy to 25°C±5°C; 2. The measurement accuracy is the error between the actual value of the DC output and the displayed value 3. The time required for the load to change from 100% to 50% or reverse, and the output voltage to recover to within the "rated value +100mV".