

## CE-6000 Specification

## 1. Model

Material code	CD-6006A-5V1200A-PS-H
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## 2. Channel information

2.1 Channels quantity	Channels per cabinet	6
2.2 Main channel	Channel characteristics	The CC-CV constant current source and constant voltage source adopt a double closed-loop structure
	Channel control mode	Independent control
	Current superposition	Equipped with a 600A superimposed channel, which can be used in intelligent parallel with 6 main channels. When parallel, the maximum output current of a single channel is 1200A

## 3. Input indicators

3.1 Input power supply	DC 750V
3.2 Power factor	DC 740V~800V, full load DC 700V~740V, reduced to 60%
3.3 Input impedance	$\geq 62.5K\Omega$
3.4 Input power	15KW
3.5 Input current	20A
3.6 Overall system efficiency (Max)	80%
3.7 Noise	$\leq 65dB$
3.8 Voltage and current sampling	Four-wire connection (same port for charging and discharging)
3.9 Power control module type	MOSFET
3.10 Input power wiring method	Two-wire system
3.11 Protection	Short circuit, overload, over-voltage, etc

## 4. The function and performance indicators

4.1 Voltage	Output range	Charger:0V~5V
		Discharge:1.5V~5V
	Min discharge voltage	1.5V
	Accuracy	$\pm 0.02\%$ of FS
	Resolution	24bit

4.2 Current	Output range	Range 1:75A; Range 2:150A; Range 3:300A; Range 4:600A (stacked channel range 4:1200A)
	Accuracy (independent range))	±0.05% of FS
	CV cut-off current	±0.05% of FS
	Resolution	24bit
4.3 Power	Single channel output power	3KW (stacked channel power: 6KW)
	Whole machine output power	13.5KW
4.4 Time	Current response time	≤3ms
	Current conversion time	≤6ms
	Min step time	0.1s
4.5 Charge/Discharge modes	Charge/Discharge modes	CCC, CVC, CCC&CVC (constant current and constant voltage smooth transition to prevent sharp current and high current impact on the battery, protect the battery), CPC
		CCD, CVD, CPD, CRD
	Cut-off condition	Voltage, Current, Δtime, Capacity, -ΔV
4.6 Simulation	Charge mode	Current, Power
	Discharge mode	Current, Power
	Switch	Support continuous switching between charge and discharge
	Cut-off condition	Time, step line
	Steps file lines	1000000
4.7 Pulse step	Charge mode	Current, Power
	Discharge mode	Current, Power
	Min pulse	50ms
	Pulse counts	Up to 32
	Charge and discharge switch	Support
	Cut-off condition	Voltage, ΔTime
4.8 DCIR		DCIR by calculation
4.9 Safely protection	Software protection	Safety protection conditions can be set, and parameters can be set, including: voltage lower limit, voltage upper limit, current lower limit, current upper limit, delay time

	Hardware protection	Anti-reverse connection protection, over-voltage protection, over-current protection, over-temperature protection, etc
5. Data management and analysis		
5.1 Step setting method	Recording condition	Form editing
5.2 Data recording		Minimum time interval: 10ms (access auxiliary channel is 100ms)
		Minimum voltage interval: 0.01V
		Minimum current interval: 2.4A
	2. Recording frequency	100Hz (access auxiliary channel is 10Hz)
5.3 Database		MySQL database
5.4 Data output mode		Excel, Txt
5.5 Curve type		Templates available, customization supported
5.6 Barcode scanning		Supports barcode scanning function, which can be achieved through battery barcodes
		Management and traceability of historical data
6. The communication mode		
6.1 The host computer communication mode		Based on TCP/IP protocol
6.2 Communication interface		Ethernet
6.3 The lower computer communication baud rate		1M bandwidth
6.4 The host computer communication baud rate		10M~100M adaptive
6.5 Networking mode		Set up local area network through switches and routers
6.6 Communication expansion (optional)		Support CAN,RS485 communication and BMS communication,with DBC configuration function
7. Environmental requirements and size		
7.1 Working temperature		-10℃~40℃ (with in the range of 25±5℃, the measurement accuracy is guaranteed:the accuracy drift is 0.005% of FS/℃)
7.2 Storage temperature		-20℃~50℃
7.3 Relative humidity of working environment		≤70% RH (no water vapor condensation)
7.4 Relative humidity of storage environment		≤80% RH(no water vapor condensation)
7.5 Size W*D*H		600*800*1850(mm)
7.6 Weight		About 150kg
7.7 Appearance of equipment (for reference)		
8. AUX Auxiliary test system(optional)		
8.1 Temperature auxiliary	Temperature range	Type T thermocouples: -70℃~260℃

channel	Temperature accuracy	$\pm 1^{\circ}\text{C}$
	Temperature resolution	$0.1^{\circ}\text{C}$
8.2 Voltage auxiliary channel	Voltage range	0V~5V
	Voltage accuracy	$\pm 0.05\%$ of FS
	Voltage resolution	0.1mV
8.3 Introduction to AUX	It is mainly used to monitor the surface and tab temperature in the battery testing process, with high testing accuracy. The test data can be bound with the main voltage and current data, and the measured temperature can be used as the control condition and protection condition of the process step.	