CE-6000 EOL Technical Specification

I. Equipment model			
Material code		CE-6001n-EOL-200V200A	
2. Input indicators			
Power input		3PH-AC380V±15% 50/60±5Hz	
Interiorinput power		47.1KW	
Input currenton		71.5A/ per phase	
Power supply wiring met- hod		Three-phase five-wire	
Insulation withstand test point		Three, main positive and negative shell	
Number of interfaces for insulation withstand voltage test		Route 2	
Connect the number of resistance test interfaces		Route 2	
Number of test interfaces on the multimeter		Route 4	
3. Function and performance indicators			
1. Charging and discharging module	Voltage	Measurement range per channel	Charging: 0V~200V
			Discharge: 5V~200V
		Minimum discharge voltage	5V
		Accuracy	±0.02% of FS
		Resolution ratio	24bit
	Current	Measurement range per channel	Range 1:25A; Range 2:50A; Range 3:100A; Range4:200A
		Accuracy (independent range)	±0.05% of FS
		Constant voltage Cut off current	0.0.5% FS (per independent scale)
		Resolution ratio	24bit
	Power	Single channel output power	40KW

	Time	Current response time	≤3ms
		Current conversion time	≤6ms
		Minimum work step time	0.1s
	DCIR	DCIR measure	Supports custom point selection for DCIR calculation
	Security guard	Software protection	Power off data protection
			It has offline testing function
			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 protection, over voltage protection, over current protection, over temperature protection, etc
2. Connect the internal resistance meter	Key index	ACIR internal resistance measurement	Scope: 3mΩ-300 Ω range is optional
			Rated input voltage: ±300V
			Resolution: up to 0.1u Ω
			Accuracy: maximum ±0.5% rdg. ±10 dgt
3. Pressure tester	Key index	Insulation resistance test	0.1M ~ 500GΩ
		DC withstand voltage test	DC(0.05～6.00)kV
		Communication withstand voltage test	AC (0.05～5.00)kV
4. Multimeter	Key index	Resolution ratio	Six and a half
		DCV，ACV	100 mV to 1,000 V
		DCI，ACI	100 μA to 10 A
5. Temperature and humidity measurement	Key index	Humidity	±2%RH(60%RH，25°C)
		Temperature	±0.5°C(25°C)
		Working range	-20°C~+60 °C, 0%RH-95%RH (no condensation)
6. Barcode scanner	Key index	Readable bar code	One-dimensional code/QR code
		Communication mode	Wireless
		Principle of scanning	Imaging scans
7. Programmable power supply	Key index	Rated voltage	0~36V
		Rated current	0~ 10A
		Noise	2mVrms ， 6mArms
8. Insulation resistance	Key index	Resistance range	50Ω~ 100MΩ

		Maximum Pressure resistance	2000V
		Adjust resolution	50Ω
9. Accessory channel	Temperature auxiliary channel	Temperature range	T type thermocouple: -70℃~260℃
		Temperature accuracy	±1℃
		Temperature resolution	0.1℃
	Voltage assisted channel	Voltage range	0V～5V
		Voltage accuracy	±0.05% of FS
		Voltage resolution	0.1mV
	AUX brief introduction	It is mainly used for surface and tab temperature monitoring in battery test process. The test accuracy is high, and the test data can be bound with the main voltage and current data. At the same time, the measured temperature can be used as the control condition and protection condition of the process step	

4. EOL test items

Order number	Test items	Functional description	Soft hardware
1.	Safety performance test	Insulation resistance test	Pressure tester
2.		High-voltage insulation test	Pressure tester
3.		Insulation alarm function test	Insulation resistance simulator
4.		HVIL check	Software, CAN
5.		Short circuit detection	Multimeter
6.		Simulate collision signals	Hardware board
7.	Battery body	Conduct internal resistance test	Connect the internal resistance meter
8.		DC internal resistance test	Charging and discharging equipment
9.		Relay detection	Multimeter, CAN, software
10.		Precharge function test	CAN, software
11.		Charging and discharging test	Charging and discharging equipment
12.		Nominal capacity test	Charging and discharging equipment
13.		Charging and discharging cycle life test	Charging and discharging equipment

14.	Battery body	Charging/ discharge circuit test	CAN, voltmeter
15.		SOC adjust	Charging and discharging equipment
16.		Overcharge/ discharge protection function test	Charging and discharging equipment, CAN
17.	BMS test	BMS, initialise	CAN, software
18.		Charge communication test	CAN, software
19.		Vehicle communication test	CAN, software
20.		CAN communication test	CAN, software
21.		Balance function diagnosis	CAN
22.		Environmental temperature comparison	Temperature and humidity meter
23.		BMS Static Power Consumption	Multimeter
24.		Fast charge status test	CAN, hardware board
25.		Slow charge state test	CAN, hardware board
26.		Single voltage detection	CAN
27.		Monomer pressure difference detection	CAN
28.		Monomer temperature detection	CAN
29.		Total voltage accuracy detection	Software, multimeter
30.		Soft and hardware version number detection	Software, CAN
31.		Clear the fault code	Software, CAN
32.	Additional function	Heating membrane resistance test	CAN, multimeter
33.		Resistance detection	Multimeter, software
34.		Integrated inspection instrument	Accessory channel
35.		Ship status test	CAN, software
5. Data management and analysis			
Work step setting met- hod		Table editing	
Data recording frequency		100Hz (the auxiliary channel of a single channel>2 is 10Hz	
Data output mode		Excel, TXT	

Bar code scanning	Support bar code scanning function, which can be realized through the battery bar code
6. Communication mode	
Upper computer communication mode	Based on TCP/IP protocol
CI	Ethernet
Upper computer communication baud rate	10M~100M adaptive
Grouping method	Build a LAN with switches and routers
Communication expansion (optional)	1. Support CAN, RS485 communication and BMS communication, with DBC configuration function 2. Support peripheral linkage: environmental test chamber, water cooling machine, pressure fixture, etc
7. Environmental requirements and size and weight	
Working temperature	-10℃~40℃ (in the range of 25±10℃, ensure the measurement accuracy: precision drift 0.005% of FS /℃)
Storage temperature	-20℃~50℃
Relative humidity of working environment	≤ 70% RH (no water vapor condensation)
Storage environment relative humidity	<80% RH (no water vapor condensation)
Equipment size W*D*H	600*800*1850(mm)
Weight	About 350 kg