

CE-6000 Specification

1、 Model

1. Material code

CE-6005n-120V300A-H

2、 Channels information

1. Channels quantity

Channels quantity in one unit

5

2. Main channel

Channel feature

Constant current source and constant voltage source dual closed loop control

Channel control mode

Independent control

Channel parallel connection

Support max 4 channels parallel mode. Pulse and SIM tests will be disabled in channels parallel mode.

3、 Power grid side parameters

1.Input power

AC380V \pm 15% 50/60 \pm 5Hz

2.Power factor

 \geq 99%(Full load)

3.THDi

 \leq 5%(Full load)

4.Input resistance

 \geq 1M Ω

5.Input power

211.8KW

6.Input current

321.8A/single

7.Overall system efficiency(Max)

90%

8.Noise

 \leq 65dB

9.Voltage and current sampling

Four-wire connection(same port for charging and discharging)

10.Power control module type

MOSFET

11.Input power wiring method

Three-phase-five wire system

12.Power input protection

Anti-surge, anti-silos, anti over or under frequency, anti over or under voltage, anti phase absence, etc.

4、 Functions and performances

1. Voltage

Output range

Charge:0V~120V

Discharge:3V~120V

Min discharge voltage

3V

| | | |
|--|---|--|
| | Accuracy | ±0.02% of FS |
| | Resolution | 24bit |
| 2. Current | Output range | 1.5A~300A |
| | Accuracy(independent range) | ±0.05% of FS |
| | CV cut-off current | 300mA |
| | Resolution | 24bit |
| 3. Power | Single channel output power | 36KW |
| | Whole machine output power | 180KW |
| 4. Time | Current response time | ≤3ms |
| | Current conversion time | ≤6ms |
| | Min. step time | 0.1s |
| 5. Charge/Discharge modes | Charge/Discharge modes | CCC, CVC, CC-CVC, CPC CCD, CVD, CPD, CRD |
| | Cut-off condition | Voltage, Current, ΔTime, Capacity, -ΔV |
| | | |
| 6. Simulation | Charge | Current, Power |
| | Discharge | Current, Power |
| | Switch | Support continuous switching between charge and discharge |
| | Cut-off condition | Time, step line |
| | Steps file lines | 1,000,000 |
| 7. Pulse Mode | Charge | Current, power |
| | Discharge | Current, Power |
| | Min pulse | 100ms |
| | Pulse counts | Up to 32 |
| | Charge and discharge switch | supported |
| | Cut-off condition | Voltage, ΔTime |
| 8. DCIR | | DCIR by calculation |
| 9. Safely protection | Software protection | Power off data protection |
| | | Offline mode function |
| | | Safety protection conditions can be set, including: voltage lower limit, voltage upper limit, current lower limit, current upper limit, delay time, etc. |
| Hardware protection | Anti-reverse connection, over-voltage, over-current, over-temperature, etc. | |
| 5、 Data management and analysis | | |
| 1. Step setting method | | Form editing |

| | | |
|--|----------------------|---|
| 2. Data report | Recording conditions | Minimum time interval: 10ms(connected with AUX channel:100ms) |
| | | Minimum voltage interval: 0.24V |
| | Recording frequency | Minimum current interval: 0.6A 100Hz(connected with AUX channel:10Hz) |
| 3. Database | | MySQL database |
| 4. Data output | | Excel, Txt |
| 5. Curve type | | Templates available, customization supported |
| 6. Bar code scanning | | Support bar-code scanning function |
| | | Management and traceability of historical data |
| 6、 Communication | | |
| 1. Host computer communication | | TCP/IP protocol |
| 2. Communication port | | Ethernet |
| 3. Communication baud rate of the testers | | 1M |
| 4. Host computer communication baud rate | | 10M~100M adaptive |
| 5. Communication setup | | Set up a LAN(local area network) through switches and routers |
| 6. Communication expansion(optional) | | Support CAN, RS485 communication and BMS communication, with DBC configuration function |
| 7、 Environmental requirements, dimension and weight | | |
| 1. Operation environment temperature | | -10°C~40°C(When the temperature is 25±10°C, the accuracy error caused by temperature change is less than 0.005% of FS per degree) |
| 2. Storage environment temperature | | -20°C~50°C |
| 3. Operation environment humidity | | ≤70% RH(no moisture condensation) |
| 4. Storage environment humidity | | ≤80% RH(no moisture condensation) |
| 5. Dimension W*D*H | | 950*800*1950(mm) |
| 6. Weight | | about 561KG |
| 7. Tester Picture(Pictures just for reference) | | |



8、Auxiliary test system(optional)

| | | |
|-----------------------------|---|----------------------------|
| 1. Temperature aux channels | Temperature range | Thermistor: -30°C~120°C |
| | | Thermocouple: -200°C~260°C |
| | Temperature accuracy | ±1°C (Length within 2m) |
| | Temperature resolution | 0.1°C |
| 2. Voltage aux channels | Voltage range | 0V~5V |
| | Voltage accuracy | ±0.1% of FS |
| | Voltage resolution | 0.1mV |
| 3. Aux Introduction | It is used to monitor the temperature of the battery surface or the tabs during the test. The aux 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 test profiles. | |