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# Cylinder Battery Cell Forming And Grading Machine For Lithium Ion Battery Testing

Cylinder battery cell forming and grading machine, Constant current-constant voltage power supply, constant current to constant voltage switching without impact, especially suitable for lithium ion battery charging requirements

- Brand:TOB NEW ENERGY
- Item No.:TOB-512-2L
- Order(Moq):1set
- Payment:L/C,T/T,Western Union
- Product Origin:China
- Shipping Port:XIAMEN
- Lead Time:30

## **Product Detail**

# **Cylinder Battery Cell Forming and Grading Machine For Lithium Ion Battery Capacitor Testing**

### **SPECIFICATIONS**

#### 1. Machine Describe

TOB-512-2L The device is mainly composed of a communication interface and a battery detection cabinet. The battery testing cabinet is composed of battery clamp and a plate body to placing fixture, a constant current constant voltage source, a registration control circuit, a sampling circuit, a single chip microcomputer and a control panel.

#### 2.Main feature

- 1. Each equipment can do constant current, constant voltage charge and constant current discharge for 512 pcs of cell which is within the voltage range.
- 2. Constant current-constant voltage power supply, constant current to constant voltage switching without impact, especially suitable for lithium ion battery charging requirements
- 3. The device adopts AVR single-chip computer as the control center, and cooperates with the peripheral sampling circuit, which can be controlled by the upper computer. When connected to the computer, the complete charge and discharge curve of all channels can be saved, or it can be separated from the upper computer and operated by the control panel. Constant current constant voltage charging, constant current discharge test, sorting by time, etc.
- 4. Each battery has its own independent constant current and constant voltage source, and the self-forming loop does not affect each other.
- 5. A LED is mounted on each of the battery fixtures as an operational status display, and when the discharge is completed, it can be used to indicate battery capacity sorting.
- 6. Real-time detection each battery voltage, when charging, first constant current charging, when the battery voltage reaches the set value, it will smoothly transfer to constant voltage charging, when the set time or current termination condition is satisfied, the charging ends. When the constant current is discharged, when the battery voltage is lower than the set value, the discharge ends and the corresponding battery indicator lights up.
- 7. With power-down protection function, the original workflow can continue to run after the power back
- 8. The upper computer can set 32 working step parameters and 256 cycles. Each upper computer can connect 1 to 15 sets of single chip microcomputer system.(suggest below 10 sets)
- 9. Supporting software features
- 1) . Use the graphical operation interface to display data such as voltage, current, time, and capacity of each battery, and display the corresponding working status and abnormal conditions in various colors.
- 2) Arbitrary segmented battery capacity indication (up to 100 segments)
- 3) The data points can be recorded according to the changing conditions of voltage, current and time to form a complete charging and discharging curve data, and the time interval of the curve data points is ≤10 seconds.
- 4) Battery sorting function under various conditions (capacity, time, open circuit voltage, discharge platform, etc.)
- 5) Automatic calculation of constant current charging ratio, capacity loss, discharge efficiency, average voltage, median voltage, etc.
- 6) Operator permission setting, hierarchical operation
- 7) Can display charge and discharge curve, cycle diagram
- 2. Technical parameter

Model	TOB-512-2L
Channel No.	512
Workflow control method	Whole Cabin control
Charging model	Constant voltage,constant current
Charge cutoff condition	Voltage, current, time, capacity
Discharge mode	Constant current
Discharge cutoff condition	Voltage, time, capacity
Sampling inspection cycle	≤10s
Voltage Measurement range	0~5V, Resolution 1mV
Battery voltage range	Charge : 0~4.5V, Discharge : 4.5~2.5V
Constant voltage range	3~4.5V
Voltage accuracy	± (0.05%RD+0.1%FS)
Current range	Charge:0.01-2A, Discharge:0.01-2A, Resolution:1mA
Current accuracy	± (0.1%RD+0.1%FS)
Time Set Range	Any setting within 0~30000 minutes, the time unit is min
Time accuracy	≤±0.1%
Clamp type	Four-wire method fixture
Clamp adjust range	10mm-90mm
Support battery type	Cylinder cell
Voltage source	3 phase 4 wire, AC380V±5%, 50HZ, Power consumption15KW

communication method	RS485, Baud rate 57600
Machine size	1440mm (length) ×500mm (width) ×1840mm (height
working environment	Temperature : 0-40°C, related temperature≤85%
Full load operating current	Phase line up to 15A, zero line up to3A
Device startup current	Air switch closing moment about 60A
N.W	About 300kg
System main configuration requirements	Minimum configuration of computer system: CPU above P4, memory above 2G, hard disk space above 200G, EGA/VGA color display, one CD-ROM, one mouse, MicrosoftTM Windows XP and above, one available RS232 serial communication port, Windows support Printer. The computer system is self-contained by the user, and the number of microcomputer systems is determined according to actual needs.

