

# RJ8500 Lithium battery Core (diaphragm) Breakdown Analysis System



#### **Product Description**

RJ8500 lithium battery core (diaphragm) breakdown analysis system is a lithium battery core, diaphragm insulation products in the heating, pressurized conditions for breakdown analysis of a (micro) short-circuit test system. The system adopts open hardware and software architecture, and provides RJ69 series pulse type Li-ion battery core short circuit tester developed by Ruijie Instrument, which can be programmed to control the heating and pressurization, and can store the test data automatically. It Meets the needs of laboratories, incoming material inspection, etc., to analyze the breakdown state of the diaphragm material under hot pressing condition.

### **Key Features**

- 100V to 2000V continuous voltage output, 1V step, status determination based on breakdown analysis characteristics:
- With the breakdown analysis function, it is able to detect the ultimate intrinsic breakdown voltage value of the diaphragm;
- With auto-detection function, it automatically starts a test when it detects that the battery cell is
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#### connected;

- With the function of discharging the electrostatic charge of the core after the completion of the test, to improve the safety of personnel and equipment; Pressure, temperature and pressing time are set according to actual requirements;
- The industrial computer can store the test result data and export it later;
- It can be tested continuously and supports manual line testing

## **Specification**

| RJ6902R Instrument Part  |   |   |             |                            |  |
|--|---|---|-------------|----------------------------|--|
| Voltage Output   | Range:50V~2000V   | Resolution :1V  | Accuracy    | r: ±(1%st.+1d              |  |
| Capacity of Cell   | 120000nF  | 120   |             |                            |  |
| Pulse Waveform Test Time   | Range:20ms~1000ms   | Resolution :1ms Accuracy: ±(0.5%st.+1dgt.)                                |             |                            |  |
| Insulation Resistance Test   | 50V-300V  | 2.0MΩ-99.9MΩ<br>100MΩ-750MΩ<br>2MΩ-2000MΩ                                 |             | ±(2%rdg.+2dgt.)            |  |
|  |   |   |             | ±(2%rdg.+2dgt.)            |  |
| 3  | 301V-700V   |   |             | ±(3%rdg.+2dgt.)            |  |
| y and the second | 701V-1150V  | $5 \mathrm{M}\Omega	ext{-}3000 \mathrm{M}\Omega$                          |             | ±(4%rdg.+2dgt.)            |  |
|  | 1151V-2000V   | $10$ Μ $\Omega$ - $400$ 0Μ $\Omega$ $400$ 1Μ $\Omega$ - $999$ 9Μ $\Omega$ |             | ±(5%rdg.+2dgt.)            |  |
|  |   |   |             | ±(15%rdg.)                 |  |
| Insulation Resistance Test time  | 0.1s~999.9s Accuracy: ±(0.1%st.+0.1dgt.)                                      |   |             |                            |  |
| Discharge resistance   | 10kΩ  |   |             |                            |  |
| Liquid crystal display   | 5.6 inch  |   |             |                            |  |
| Judgment parameters  | Charging Time Tp, Output Voltage Vp, Drop Voltage Vd, Insulation Resistance R |   |             |                            |  |
| Test Mode  | Voltage maintenance, free discharge   |   |             |                            |  |
| Extended Functions   | Automatic detection, breakdown analysis                                       |   |             |                            |  |
| External Interfaces  | Standard: PLC (switch 485   | ning), RS232, USB   | storage; op | otional: LAN interface, RS |  |
| Operating Environment  | 0°C~40°C,20%RH~70%RH  |   |             |                            |  |
| Power Supply   | AC220V,50/60Hz,200VA  |   |             |                            |  |
| Weight   | 10.7kg  |   |             |                            |  |
| Hot pressing operation table   |   |   | KY,         |                            |  |
| Temperature range  | <120°C, resolution 1°C  |   |             |                            |  |
| Pressure adjustment range  | 500kgf~5000kgf, resolution 100kgf   |   |             |                            |  |
| Stroke of upper platen   | 145mm   |   |             |                            |  |
| Size of upper platen   | 210mm×210mm(can   | 210mm×210mm(can be customized according to diaphragm size)                |             |                            |  |
| Lower heating table size   | 210mm×300mm(can   | 210mm×300mm(can be customized according to diaphragm size)                |             |                            |  |

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