



UT677A Battery Internal Resistance Tester



Internal resistance test Voltage test Temperature test Fast response



Bluetooth APP Data storage PC software Lithium battery



The battery internal resistance tester is a measuring instrument used to measure the internal resistance, voltage, and temperature of rechargeable batteries such as lead-acid batteries and lithium batteries to judge the health status of the battery.

It can also be used as an instrument to measure the ESR parameters of electrolytic capacitors. UT677A uses the AC 4-terminal test method to measure the internal resistance of the battery, which can measure the correct measurement value without being affected by the contact resistance between the test lead, the terminal, and the battery electrode.

The whole machine is high-grade and beautiful, with a wide range, high resolution, convenient operation, convenient carrying, accurate, reliable, stable performance, and strong anti-interference ability. It is an indispensable instrument for battery production, battery installation, equipment production, equipment maintenance, and other scenarios.

| Function | Range | Resolution |
|--|---------------------------------------|------------|
| Battery Internal resistance range | 0.000mΩ~3 mΩ / ±1 % fs. ±20 dgt | 1uΩ |
| | 3.000mΩ~30 mΩ / ±0.5 % fs. ±15 dgt. | 10uΩ |
| | 3.000mΩ~300 mΩ / ±0.5 % fs. ±15 dgt. | 100uΩ |
| Battery Voltage range: | 300mΩ~3 Ω / ±0.5 % fs. ±15 dgt. | 100mΩ |
| | 0.000V~±7 V / ±0.2 % fs. ±10 dgt. | 1mV |
| Temperature range: | 7 V~±71.00V/ ±0.2 % fs. ±10 dgt. | |
| Accuracy Guaranteed Temperature Humidity | -10.0°C~60.0°C (single range)/ ±1.0°C | 0.1°C |
| | 23°C±5°C, <75%rh | |

| Features | |
|----------------------------------|--|
| Measuring method | 1, Internal resistance measurement: 1KHz AC 4-terminal test method, open-circuit terminal voltage 3V max 2, Measuring current: 2.0mA~200mA (different measuring currents in different ranges) 3, Temperature measurement: NTC temperature sensor (10KΩ at 26°C) 4, A/D conversion method: successive approximation type; 5, Display update frequency: 5 times/second |
| Screen | 3.5 inches (320x240, 16-bit true color screen) |
| Response time | 200ms |
| Measuring time | about 2 sec |
| USB interface | Read real-time measurement values, read historical measurement records |
| Bluetooth app | √ |
| Data hold and storage | 1, Manual hold and storage, automatic hold and storage; 2, Up to 5000 set measurement data storage; |
| Measurement judgment function | PASS, WARNING, FAIL judgment thresholds can be preset |
| Power | 1, DC 3.7V lithium battery; 2, 5-bar display of power, reminding to charge in time |
| Power consumption | 300mA MIN / 500mA MAX |
| Automatic shut-down | Around 15 minutes |
| Weight | 480g (including battery) |
| Dimension | 190mm×121mm×51mm (LxWxH) |
| Working temperature and humidity | -10°C~40°C; below 80%RH |
| Storage temperature and humidity | -20°C~60°C; below 70%RH |
| Insulation resistance | Above 20MΩ (500V between circuit and case) |
| Puncture test | AC 3700V/rms (between circuit and case) |
| External magnetic field | <40A/m |
| External electric field | <1V/m |
| Suitable for safety regulations | IEC 61010 |