

## UT677A Battery Internal Resistance Tester



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
	0.000mΩ~3 mΩ / ±1 % fs. ±20 dgt	1uΩ
Battery Internal resistance range	3.000mΩ~30 mΩ / ±0.5 % fs. ±15 dgt.	10uΩ
	3.000mΩ~300 mΩ / ±0.5 % fs. ±15 dgt.	100uΩ
	300mΩ~3 Ω / ±0.5 % fs. ±15 dgt.	100mΩ
Battery Voltage range:	0.000V~±7 V / ±0.2 % fs. ±10 dgt.	1mV
	7 V~±71.00V/ ±0.2 % fs. ±10 dgt.	
Temperature range:	-10.0°C~60.0°C (single range)/ ±1.0°C	0.1°C
Accuracy Guaranteed Temperature Humidity	23°C±5°C, <75%rh	
Features		
Measuring method	<ol> <li>Internal resistance measurement: 1KHz AC 4-terminal test method, open-circuit terminal voltage 3V max</li> <li>Measuring current: 2.0mA~200mA (different measuring currents in different ranges)</li> <li>Temperature measurement: NTC temperature sensor (10KΩ at 26°C)</li> <li>A/D conversion method: successive approximation type;</li> <li>Display update frequency: 5 times/second</li> </ol>	
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	
Bluethooth app	V	
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 20M $\Omega$ (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	