

## T-315

### PORTABLE BATTERY TESTER

The T-315 battery tester is a measuring instrument used to measure the internal resistance, voltage and temperature of rechargeable batteries such as lead-acid battery and lithium battery, so as to judge the battery health status. At the same time, it can be used as an instrument to measure the ESR parameters of electrolytic capacitor (for reference only). The instrument uses the AC 4-terminal test method to measure the internal resistance of the battery, and can measure the correct measurement value without being affected by the contact resistance between the test line, terminal and battery electrode. At the same time, it also has the functions of data storage, data access, alarm, automatic shutdown and so on. The whole machine has the advantages of high-grade and beautiful appearance, wide range, high resolution, convenient operation, convenient carrying, accuracy, reliability, stable performance and strong anti-interference ability. It is an indispensable instrument for battery production, battery installation, equipment production, equipment maintenance and other scenes. T-315 portable battery testers support the maintenance of UPS and storage batteries critical to the life support of all businesses. The T-315 battery internal resistance tester sets the standard for assessing the deterioration and remaining life of UPS and other lead-acid batteries by giving a complete diagnosis via battery resistance testing.

The T-315 battery tester is controlled by microprocessor, and the internal 16 bit ADC can accurately detect the battery internal resistance, voltage and temperature. It is characterized by measuring without stopping the UPS system, using AC low resistance measurement and noise reduction technology, without stopping the normal operation of the tested equipment, and measuring under the running state, which greatly shortens the test time. At the same time, it has the functions of histogram display, data upload to computer, PDA and other intelligent devices, such as Bluetooth connection for wireless measurement, data access and so on.

## Features

1. 7V/70V range;
2. With USB port;
3. Low power design;
4. Storage 5000 data logger;
5. 3m $\Omega$ /30m $\Omega$ /300m $\Omega$ /3 $\Omega$  range;
6. Built in batteries power supply;
7. High resolution 1u $\Omega$  and 1mV;
8. Four wire method measurement;
9. Using noise reduction technology;



## Functions

1. Check the battery health status;
2. Measurement the internal resistance of battery;
3. Measurement the voltage of battery;
4. Support the maintenance of UPS and storage batteries;
5. Measurement the temperature of battery;
6. Measurement the ESR parameters of electrolytic capacitor;

## Parameters

Electrical parameters	
Resistance measurement range	3mΩ/30mΩ/300mΩ/3Ω
Resolution	1uΩ/10uΩ/100uΩ/1mΩ
Accuracy	1%
Voltage measurement range	7V/70V
Resolution	1mV/10mV
Accuracy	0.5%
Temperature measurement range	-10.0 °C~60.0 °C
Resolution	0.1 °C
Accuracy	±1.0 °C
Measurement method	Internal resistance measurement: 1kHz AC 4-terminal test method, open circuit terminal voltage 3V max Measuring current: 2.0ma ~ 200mA (different measuring currents in different ranges and gears) Temperature measurement: NTC temperature sensor (10K Ω at 26 °C) A / D conversion mode: successive approximation type Display update frequency: 5 times / second
Response time	100ms
Measurement time	about 2 seconds
LCD display	70.1mm×52.6mm / 3.5 inches (320 * 240 resolution 16 bit TFT)
Communication port	USB, Bluetooth
Storage data	max 5000 sets
Key	10pcs
Power supply	DC 3.7V rechargeable lithium battery
Insulation resistance	above 20MΩ (500V between circuit and shell)
Withstand voltage	AC 3700V / RMS (between circuit and shell)
External magnetic field	< 40A/m
External electric field	< 1V/m
Consumption	300mA MIN / 500mA MAX
Standard	IEC 61010

**Electrical parameters - continued**

Consumption	300mA MIN / 500mA MAX
Standard	IEC 61010

**Mechanical parameters**

Dimensions (WxDxH) (mm)	190x121x51
Weight (g)	480 (with battery)

**Environmental conditions**

Operating Temperature	-15°C to +55°C
Storage Temperature	-20°C to +65°C
Relative humidity	0%-95% RH