RJ6962　Battery self-discharge analysis system

Product Description

In the production test of lithium batteries, self-discharge has always been an important indicator to consider. The traditional test method will test the open circuit voltage (OCV) of the battery, and the K value of the battery can be calculated by observing the change of the open circuit voltage with time. However, this traditional test method needs a long time to stand, so that the open circuit voltage can be sufficiently changed to determine whether the self-discharge capacity of the product is within the allowable range. Due to the large capacity of battery manufacturers, this test method will allow the produced batteries to be stored in the warehouse for a long time, resulting in a lot of funds being occupied by the warehouse. It can be seen that quickly identifying whether self-discharge is qualified has become a top priority for all battery manufacturers.

The RJ6962 Battery self-discharge analysis system can quickly and accurately test the self-discharge current of up to 16 batteries simultaneously for up to 30 minutes.

At the same time, the test mode has two optional modes: approximation mode and normal mode. The test software opens the parameter setting function, and the user can set the initial measurement value, test mode, temperature compensation parameter, and test start and stop according to the actual battery capacity. Higher degrees of freedom, and even low-capacity battery test times can be reduced to about 10 minutes after multiple tests by fixing the starting parameters.

Key Features

- Fast recognition of the self-discharge current with a minimum time of 30min;

- Output voltage 0.5V~5V;

- Ultra high output stability, voltage output fluctuation Vpp<10μV;

- Voltage and current external calibration;

- With temperature compensation function, it can make up for the influence of ambient temperature change on the battery to a certain extent;

- Can be paired with a customized constant temperature test chamber for laboratory development and validation;

- The upper computer software can set the starting test value, test mode, temperature compensation parameters, record the detailed current curve, and generate excel test files, which can observe, analyze and record the change of self-discharge status.
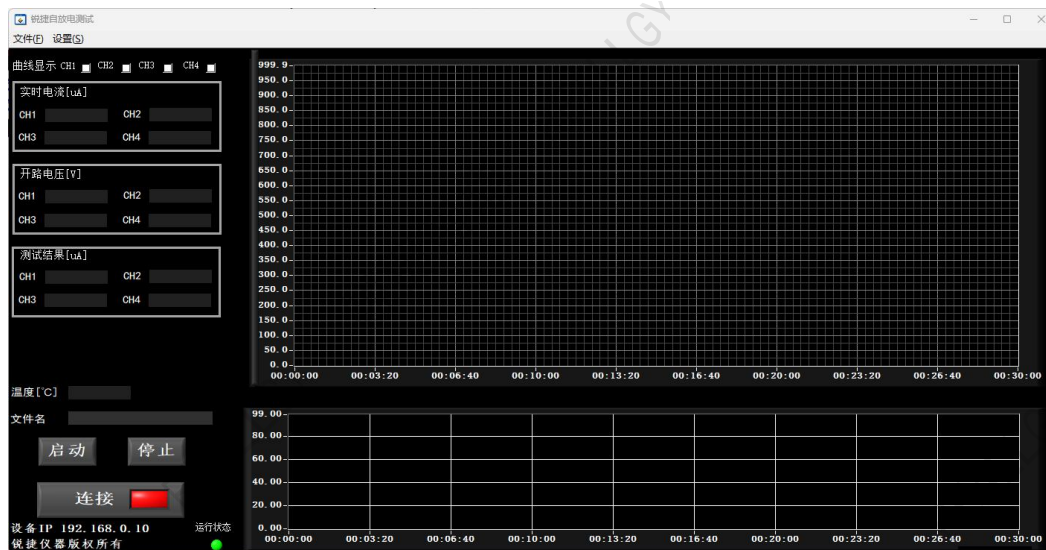
Upper computer interface
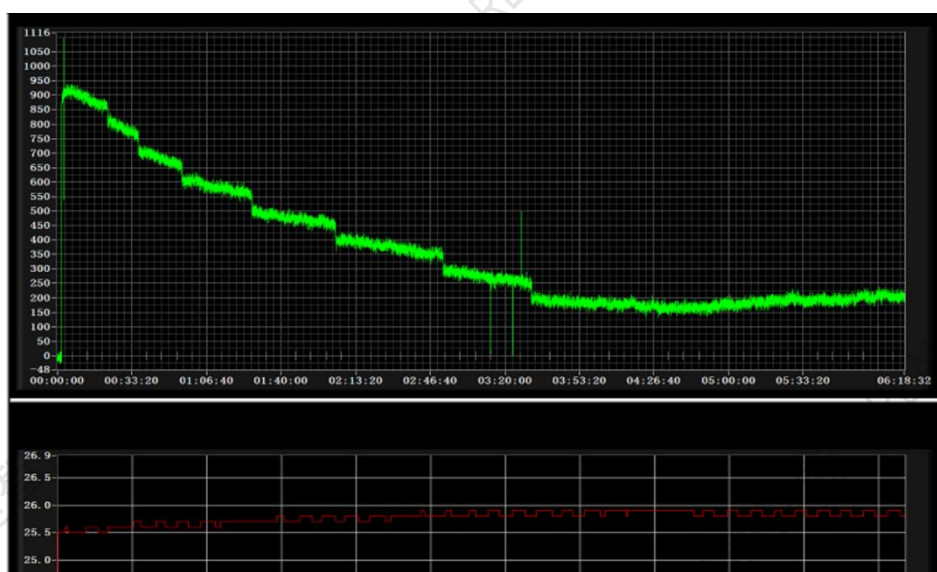
Test Example

Overall interface of the upper computer

Specification

Model	RJ6962
Number of channels	2~16 channels
Voltage Range	0.5V~5V
Voltage resolution	1μV
Voltage output stability (Vpp)	<±10μV
Current Measurement Accuracy	±(0.1%rdg.+2μA)
Voltage Measurement Accuracy	±(0.05%rdg.+200μV)
Test Time	30 minutes
Test Mode	Approximation mode, normal mode
Temperature test accurate reading	±0.5℃
Temperature compensation range	<±1℃
Thermostat temperature control range	5℃~50℃
Thermostat temperature control accuracy	±1℃
Thermostat temperature uniformity	±2%
External Interfaces	LAN,RS232,RS485
Suggested SOC	≤10% or ≥90%
Operating Environment	0℃~40℃,20%RH~75%RH
Power Supply	AC220V,50/60Hz
Net weight	8.5kg
External Dimension	340mm×133mm×380mm (W×H×D)without foot, foot height 15mm