

## BTS4000: The One for All Batteries



BTS4000 is the upgrade version of the most popular battery test equipment series of BTS3000. Comparing with BTS3000, BTS4000 greatly improved the hardware response time, data acquisition frequency and result accuracy. BTS4000 provides higher data acquisition frequency up to 10Hz to enable you get more data in the same time period, this is pretty helpful in C-Rate or DCIR (Direct Current Internal Resistance) tests. And it also has a faster system output response and better accuracy when compared with BTS3000.

BTS4000 applies various applications of battery tests: charge, discharge, OCV, DCIR, Pulse, Driving simulation, Cycle-life, etc. The output ranges of BTS4000 for cells start from 5V1mA up to 5V50mA, 5V6A, 5V10A, and highest 5V3000A. And the BTS4000 models for battery modules and packs start from 10V1A up to 10V10A, 20V50A, 50V60A, 60V100A, and highest 100V100A.

Due to the wide output range and powerful functions of BTS4000, it can be used to test cells, battery modules and packs, super capacitors.

By the end of year 2017, Neware sold more than 140,000 sets of BTS4000. Battery manufactures use it in their large scale automated lines for battery formation, grading, OCV and capacity check; research institutes and universities use it for cycle-life, capacity and DCIR tests; battery importers and exporters use it to do the sample quality check; laboratories use it to do material research and certificates.

## Features and Applications

- Extremely high accuracy( $\pm 0.05\%$  of FS, some of the models)
- Min pulse width: 500ms
- Up to 10Hz data record frequency
- Adaptable to a wide range of products: cells, super-capacitors, battery modules and packs, etc.
- Wide range of applications : Charge, Discharge, Pulse, DCIR, Cycle-life, C-Rate, HPPC, etc;

- Multi-current range available(2 ranges per channel for some models), great for from low to high C-rate test on one machine.
- Every channel can be user programmed to operate in steps of CCC(Constant Current Charging), CVC(Constant Voltage Charging), CC&CVC(Constant Current & Constant Voltage Charging), CPC(Constant Power Charging), CCD(Constant Current Discharging), CPD(Constant Power Discharging), Pulse, DCIR, etc.
- Completely independent channels allow users to run multiple independent tests simultaneously without affecting other channels
- With the BTS client software, data is easily viewed both in plain text and plot/graph
- Diverse alligators and probe connection accessories for choose
- Modular design, testers can be easily stack/mount together
- Ranges, colors and even functions(Discharge battery to 0V, Cell voltage and temperature monitor, etc) can be customized.

## Typical BTS4000 Tester Models

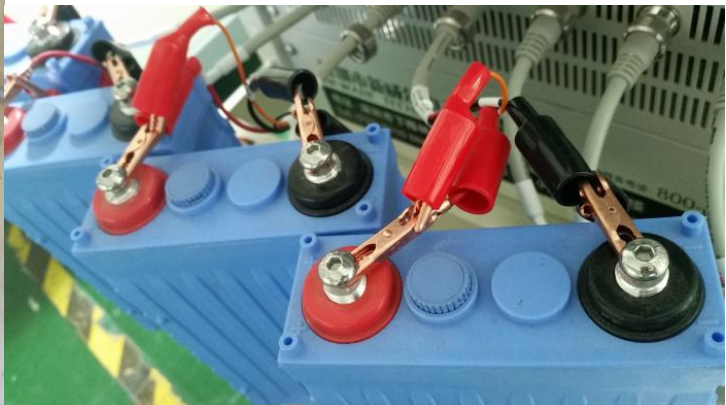
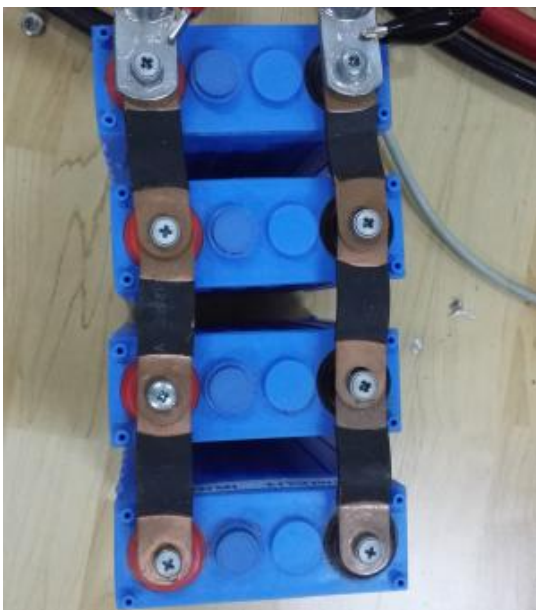
### 1. BTS4000 For coin cells: 5V10mA, 5V20mA, 5V50mA



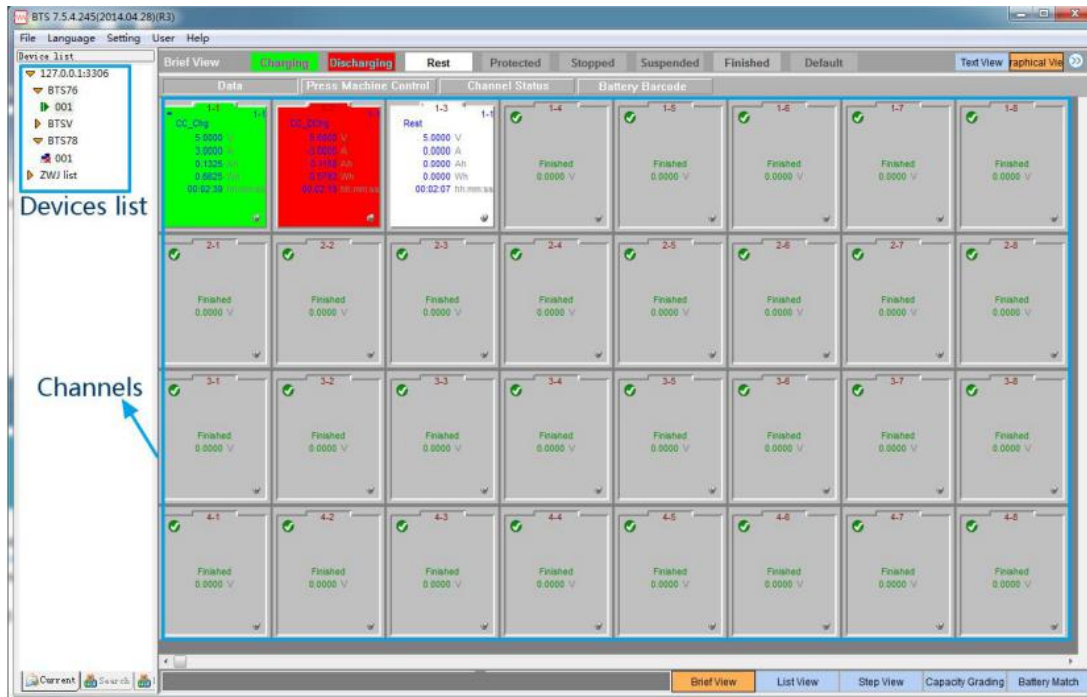
## 2. BTS4000 For cylindrical and small pouches: 5V6A, 5V12A



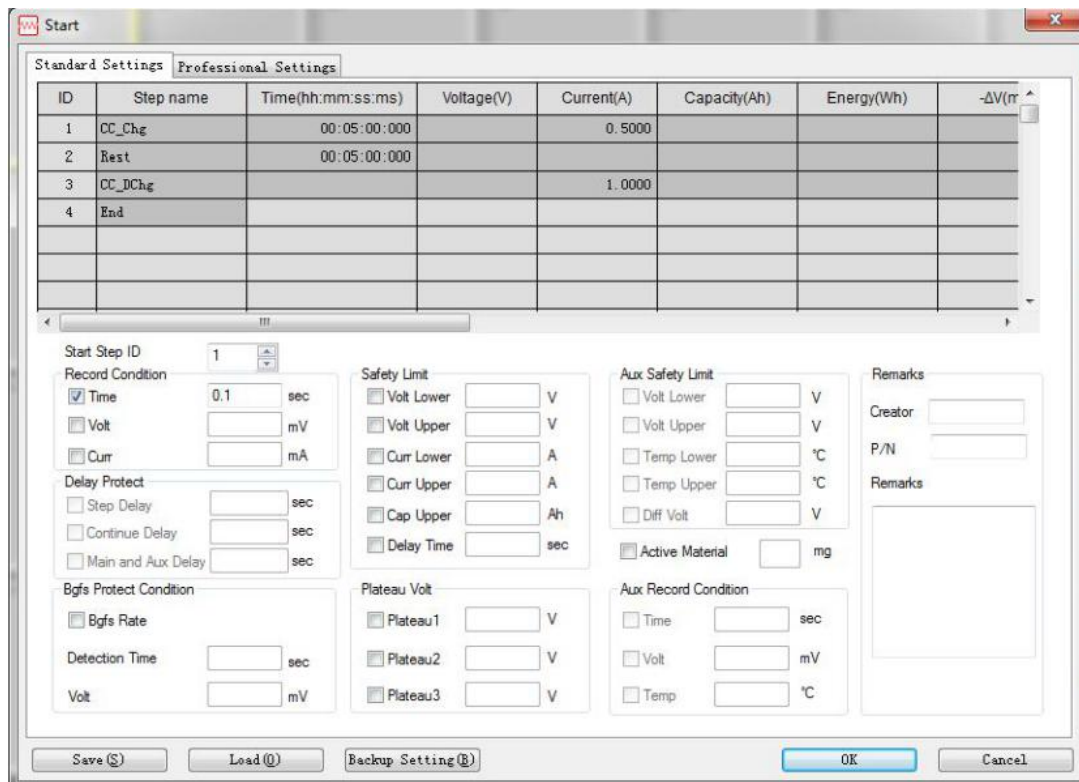
## 3. BTS4000 For big cells, modules and packs: 5V50A, 5V100A, 20V50A, 50V50A, 60V100A, 100V100A, etc.



## Software UI and Settings



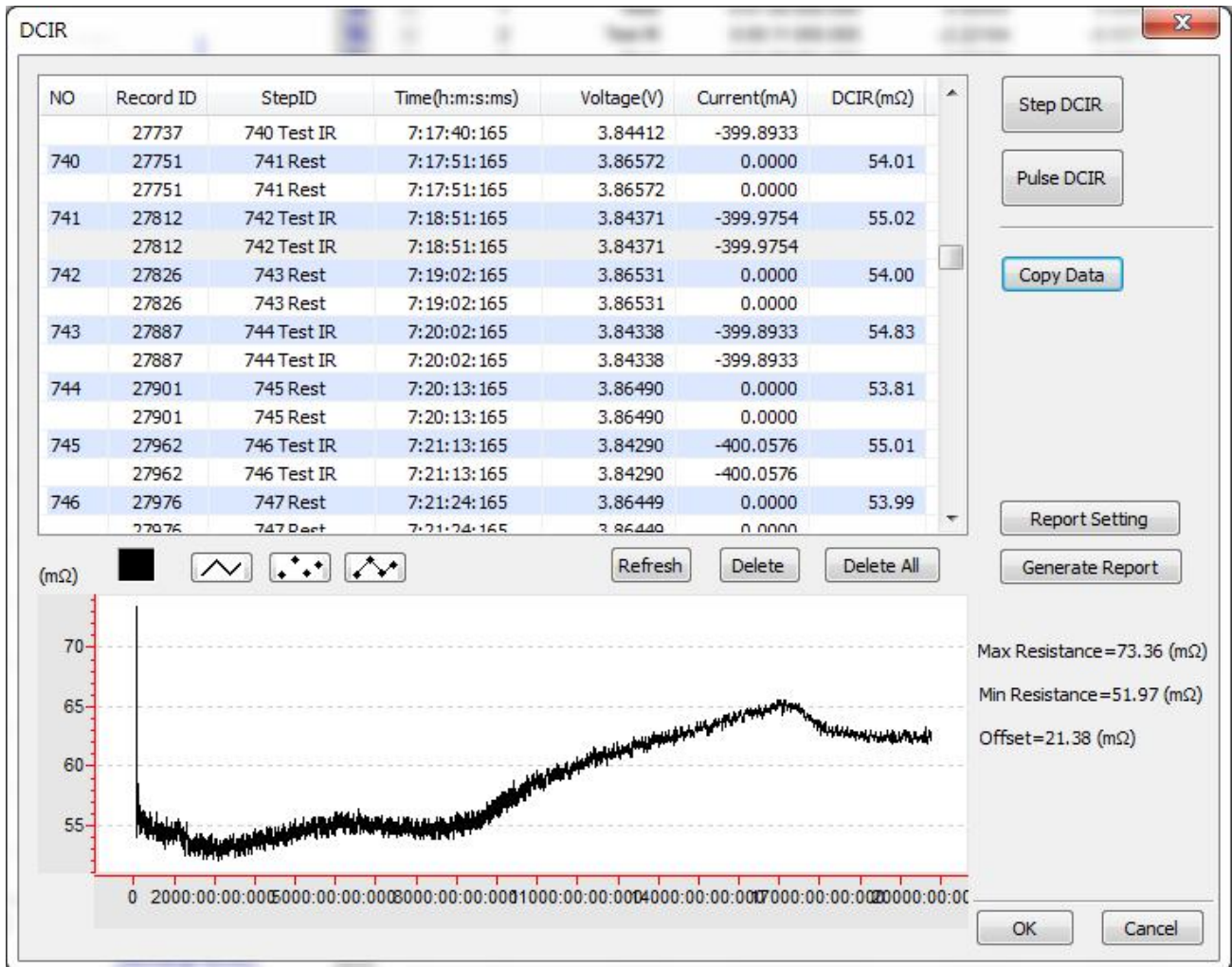
Main window, easily to operate(start up,pause,stop tests) and manage all devices and channels in graphic UI.



Users can create their own tests scripts, easy and intuitive.

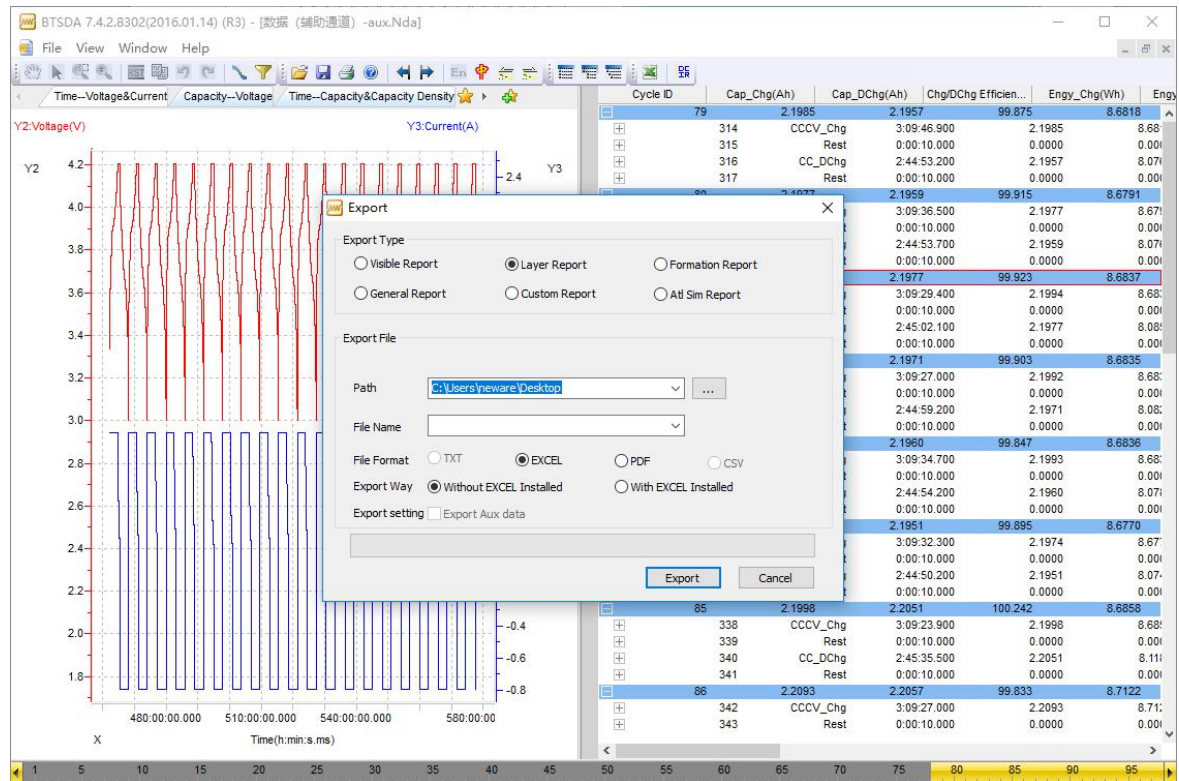
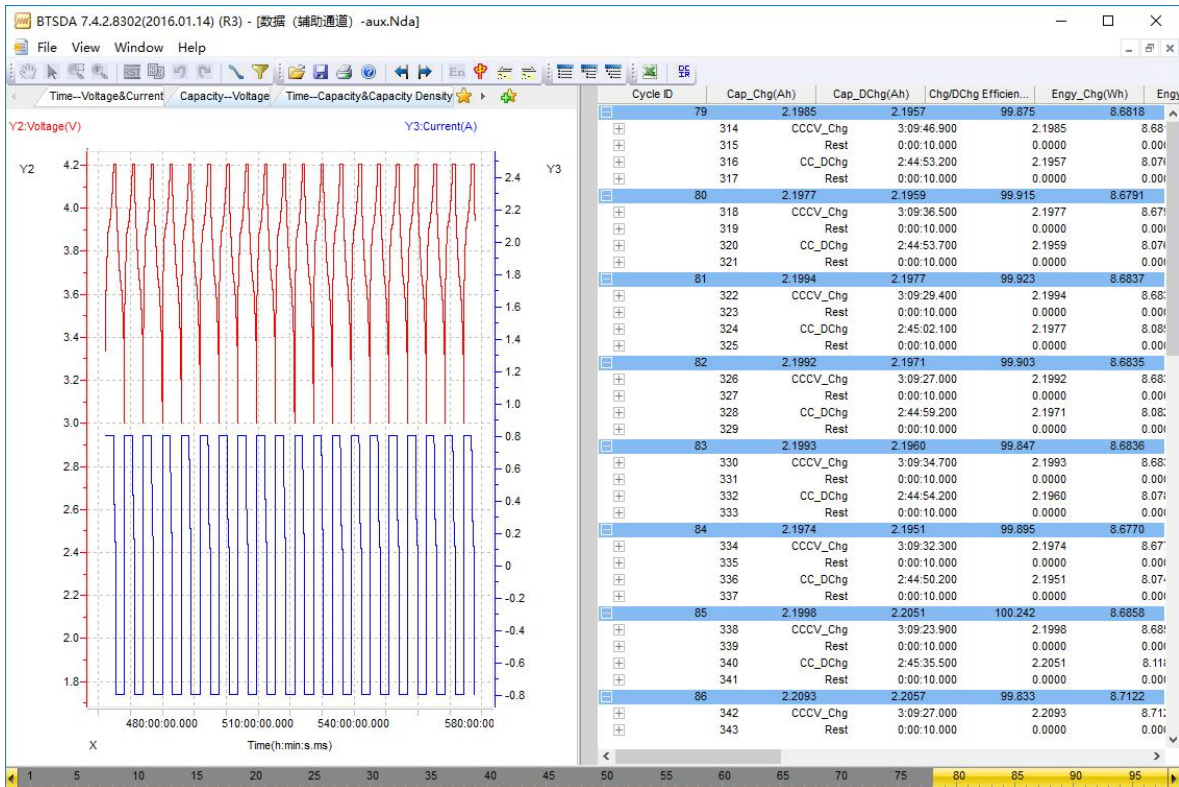
# Typical Tests Results Overview

## 1. DCIR test



The DCIR test in BTS9000 is based on IEC standard. As the discharge process goes on, the DCIR of the cell increases gradually.

## 2. Cycle Life Test Result



Data can be export to xls/csv/txt format for further using.