BTS9000：The Most Cutting-edge equipment for Battery Material Research

BTS9000 is based on Neware 6th-generation testing system. It's designed for battery material research, high-precision tests, pulse charge/discharge tests, DCIR test, and cycle life test.

As the most cutting-edge equipment for battery material research, BTS9000 comes with extremely high accuracy(± 0.02% of FS), amazing hardware response speed(≤ 100 μ s), wide range of applications, high-speed testing data acquisition and many other industry-proven characteristics, it's your ultimate choice for battery material research!

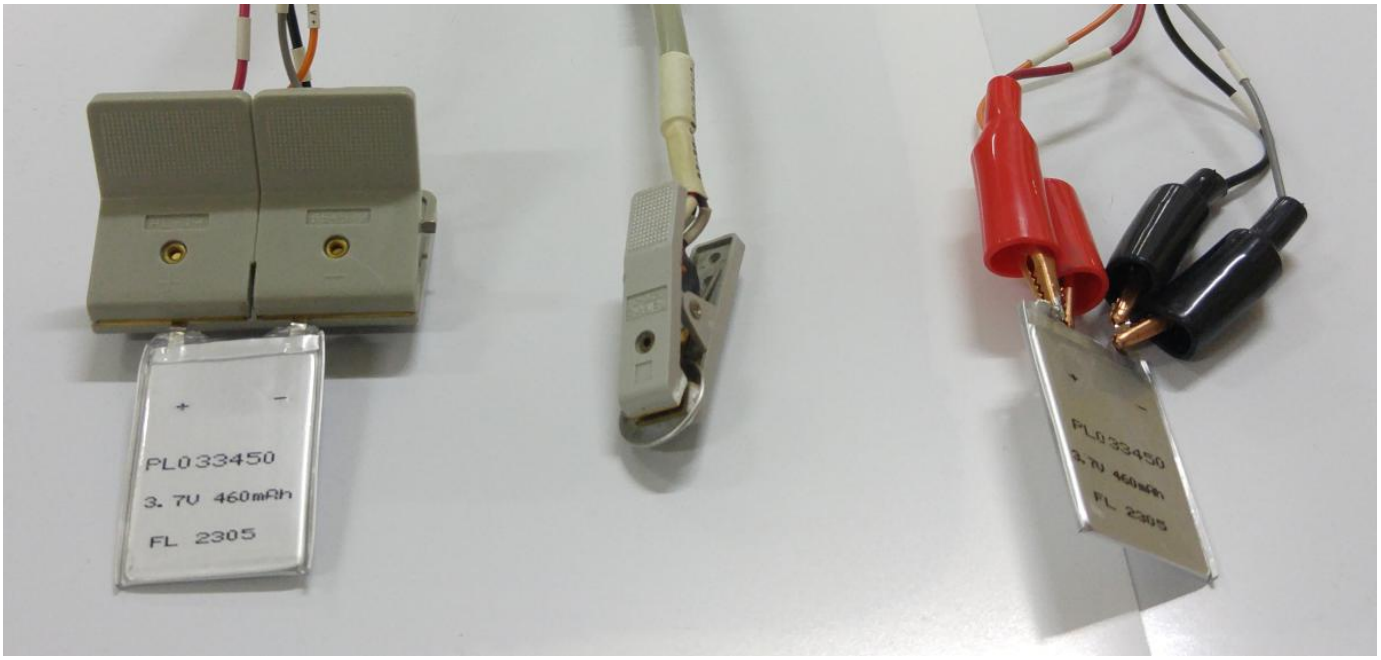
Comes to the pulse tests, BTS9000 supports GSM(Global System for Mobile Communications), GPRS(General Packet Radio Service), CDMA-standby, CDMA-talk(Code Division Multiple Access), IDEN(Integrated Digital Enhanced Networks), etc. It characterized with a data acquisition frequency up to 1000Hz, an accuracy of 0.02% FS and a minimum pulse width of 400us (microsecond) which can be utilized for GSM or some other rapid pulse tests.

Features and Applications

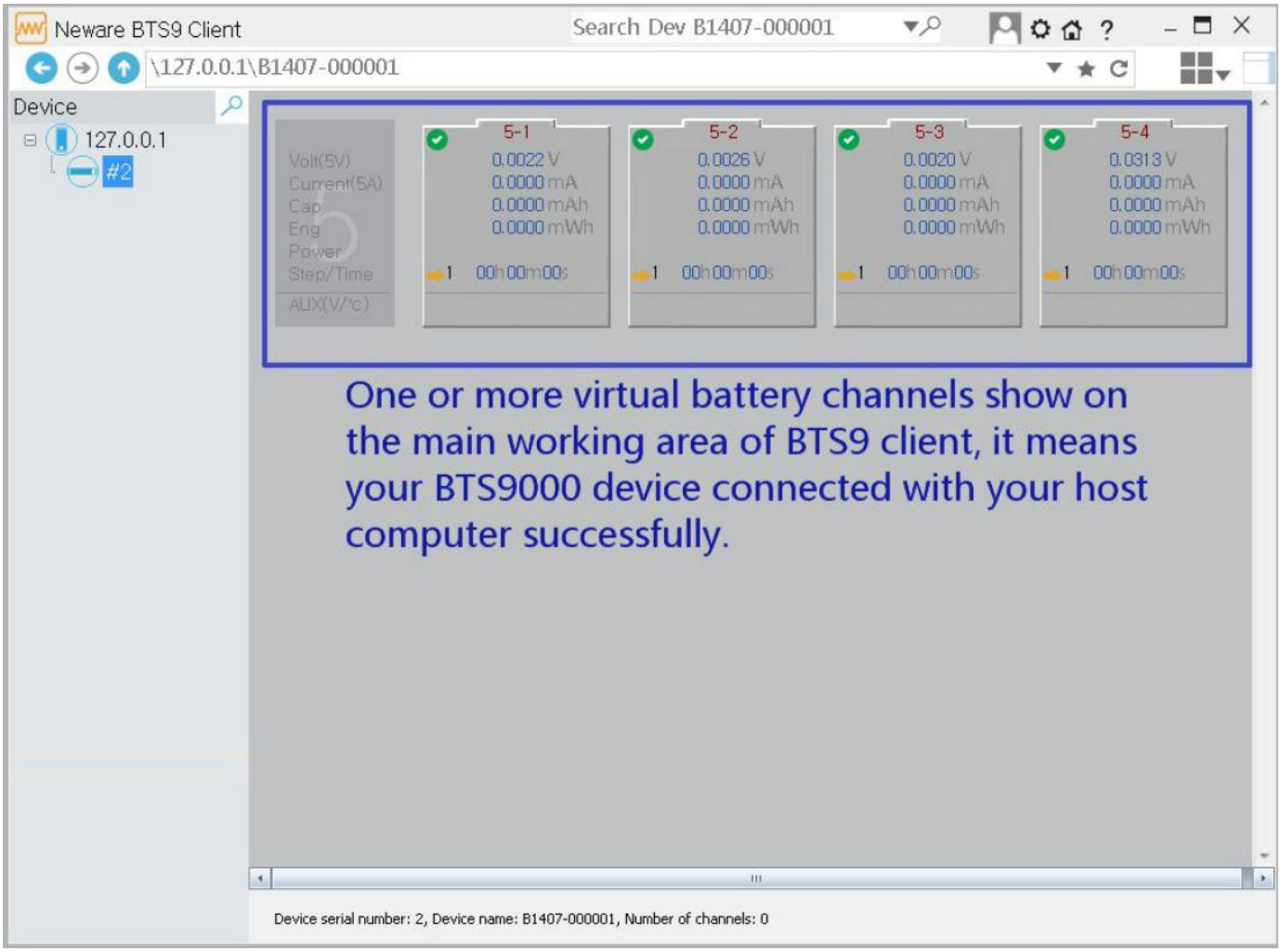
- Extremely high accuracy(±0.02% of FS)
- Hardware Response Time: ≤100 μ s
- Min pulse width: 400 μ s
- Up to 1000Hz data record frequency
- Adaptable to a wide range of products: cells, super-capacitors and samll battery modules, etc.
- Wide range of applications : Charge, Discharge, High frequency pulse, DCIR, Cyce-life, C-Rate, HPPC, etc;
- Multi-current range available(4 ranges per channel), 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
- Online support and upgrade support, just in case the software or hardware is out of working, Neware engineers can help customers to locate and fix the problem by remote desktop, and the firmware of BTS9000 can be upgraded by customers themselves whenever there's new version released.

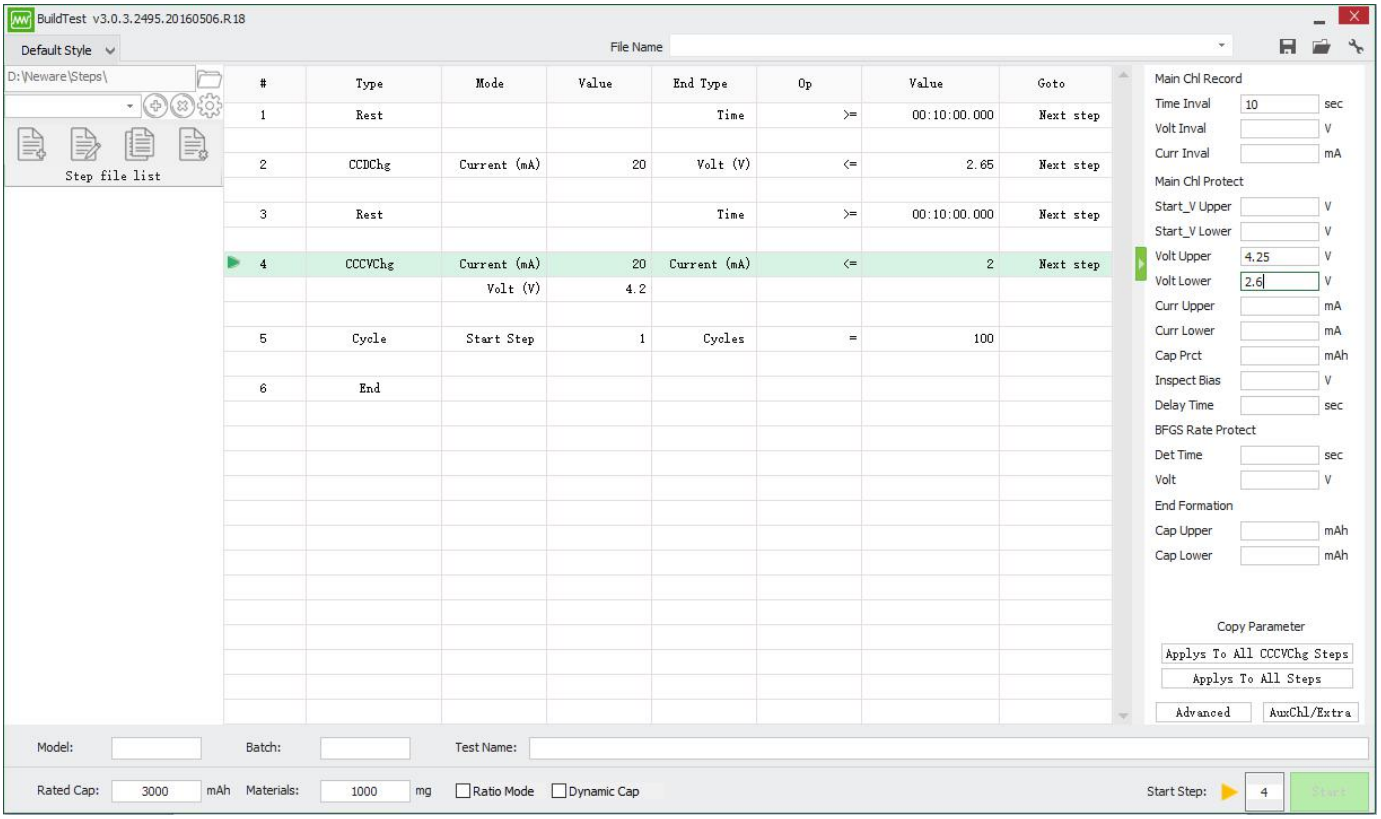
Available Clamps/Jigs



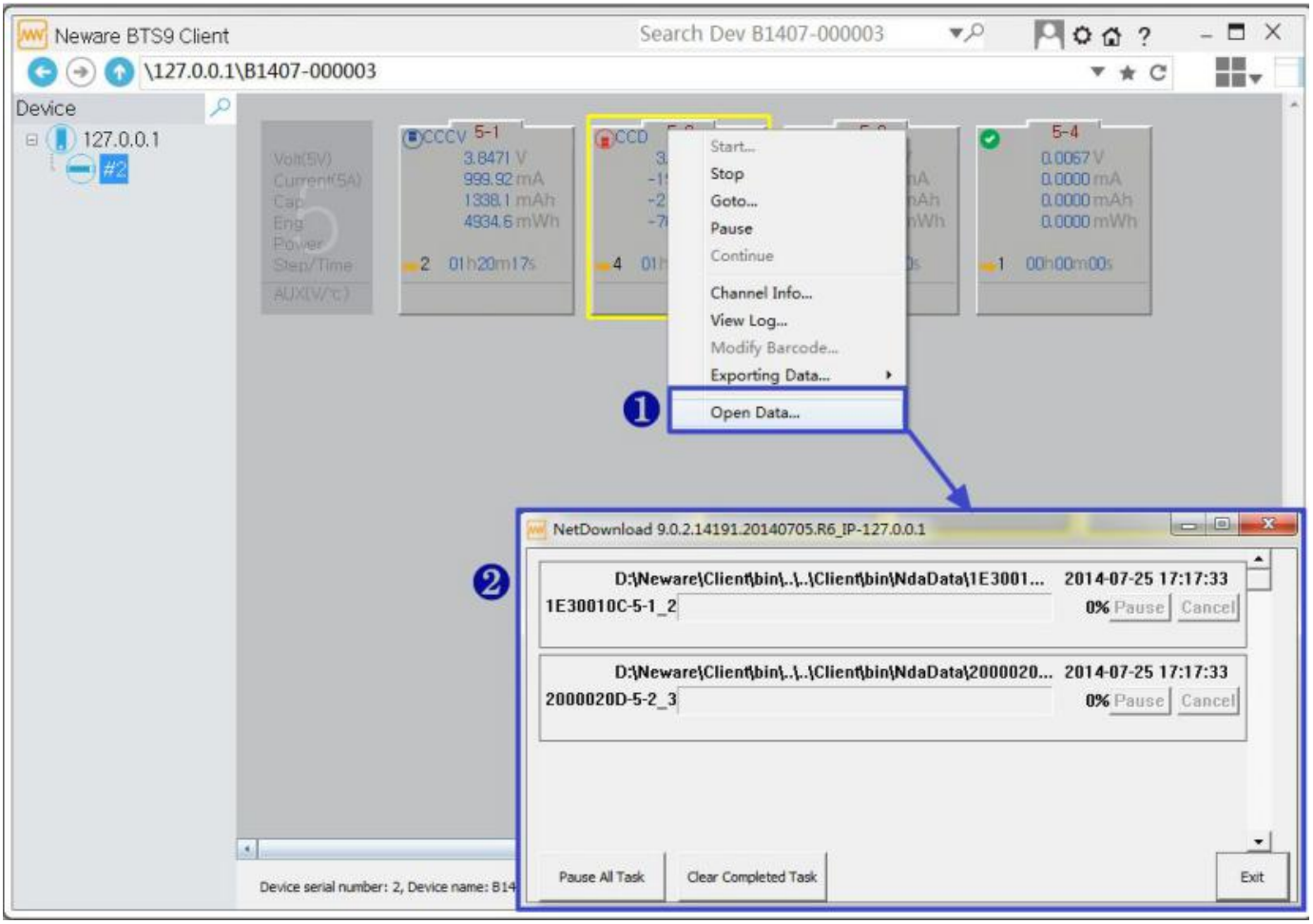
Software UI and Settings



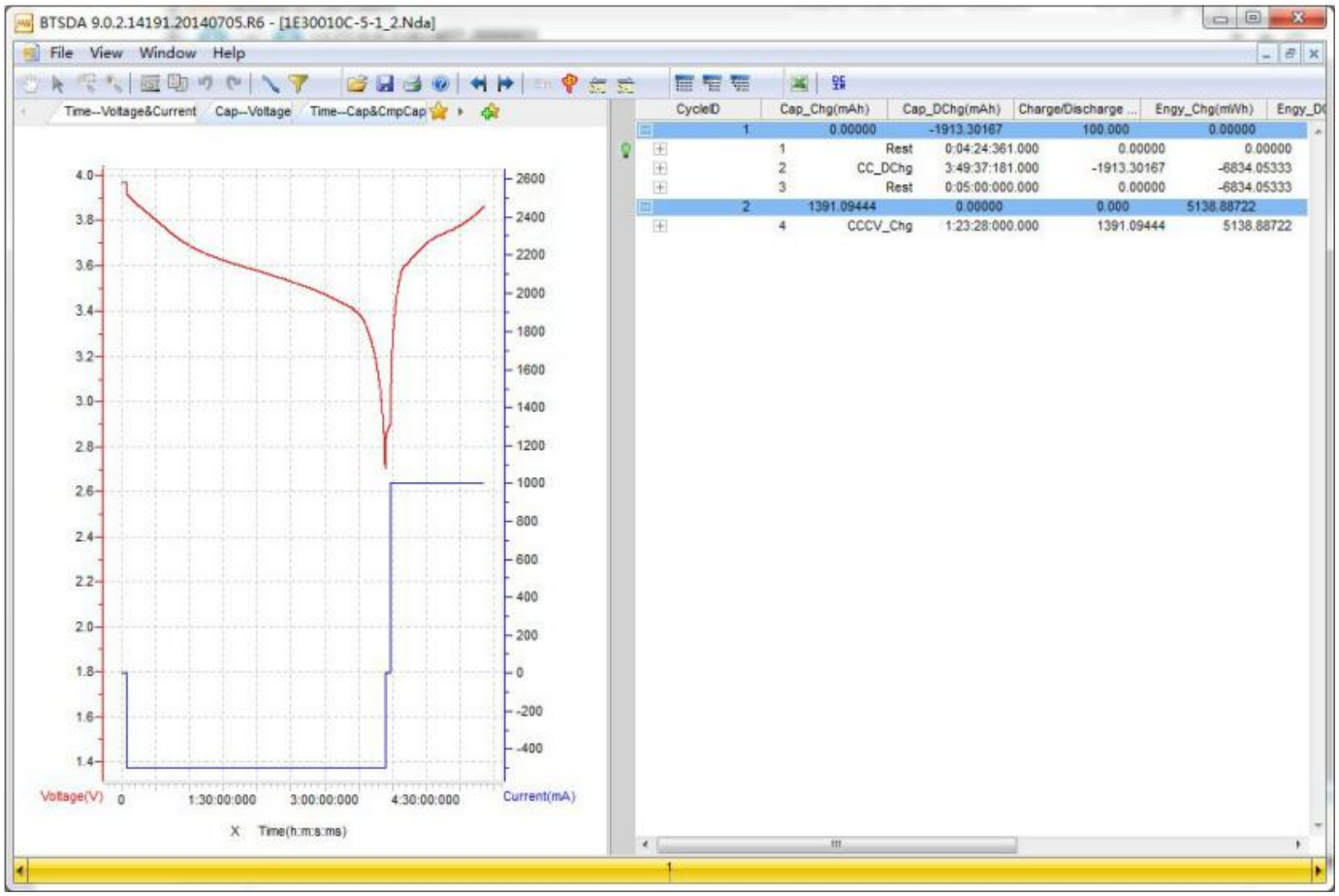
User friendly interface.



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



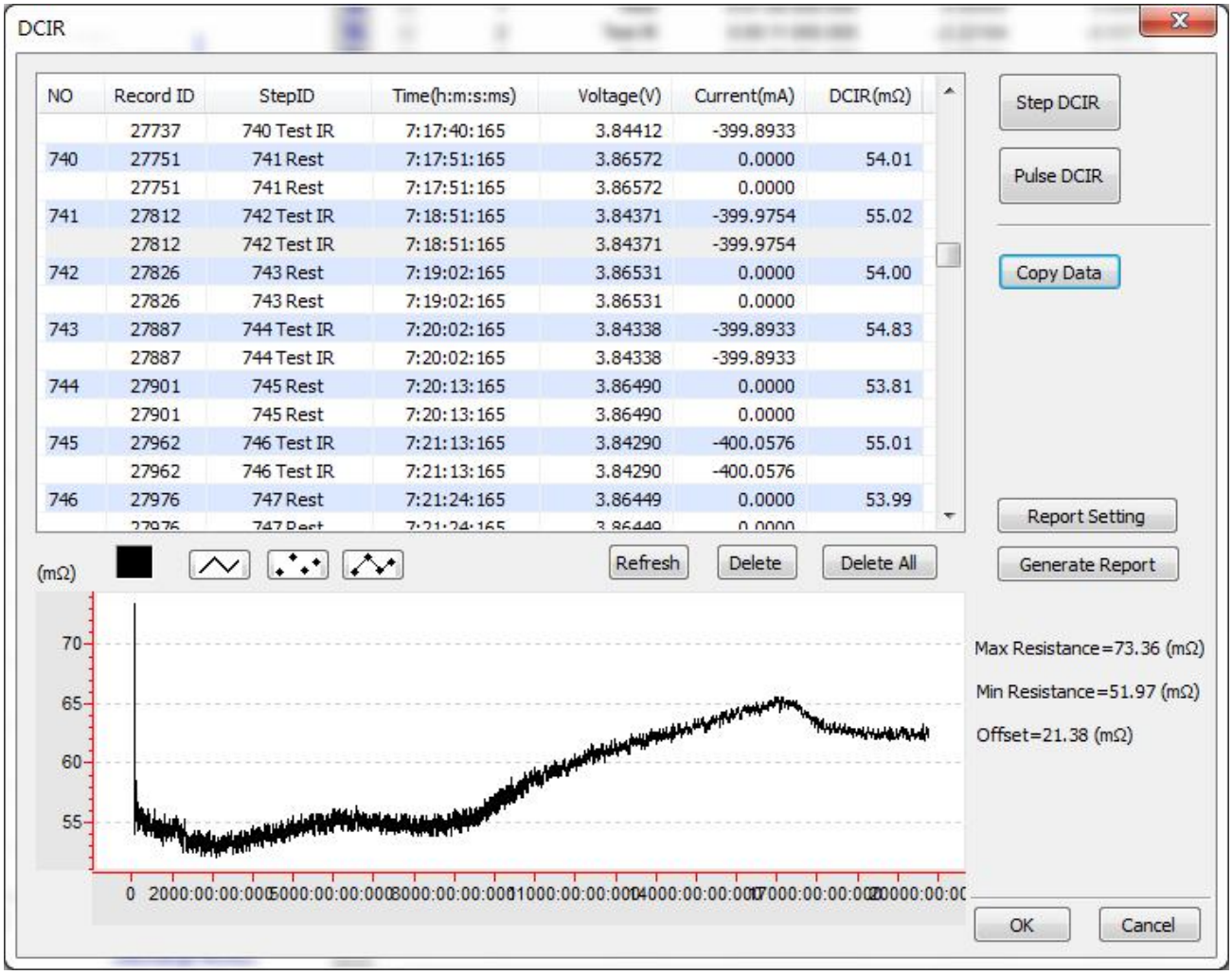
During and after the test, you can always check the testing result.



Data shows both in plain text and graph.

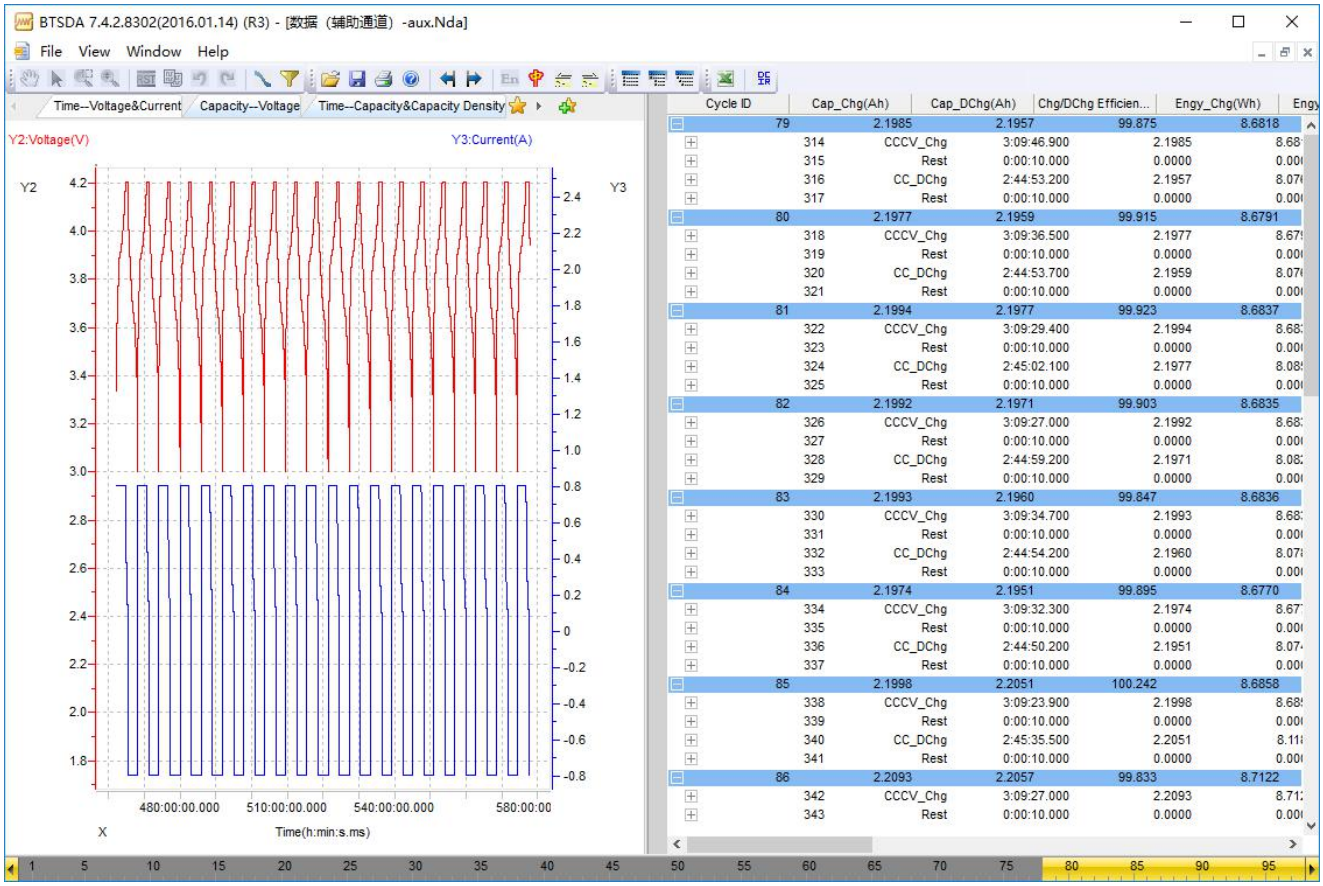
Typical Tests Results Overview

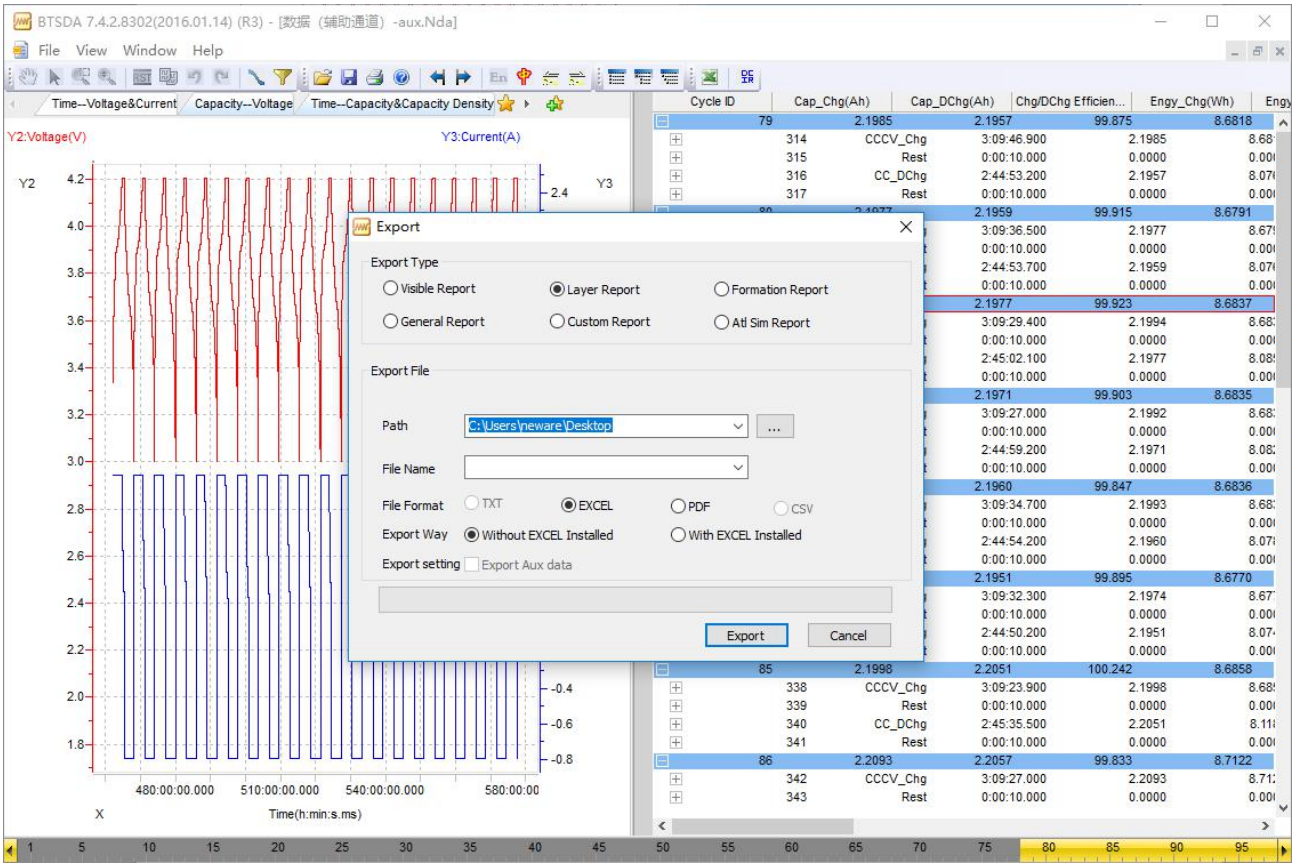
1. DCIR test



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


BTSDA 7.4.2.8302(2016.01.14) (R3) - [数据（辅助通道）-aux.Nda]
File View Window Help
Time--Voltage&Current
Capacity--Voltage
Time--Capacity&Capacity Density
Y2:Voltage(V)
Y3:Current(A)
Y2
Y3
X
Time(h:min:s.ms)
480:00:00.000
510:00:00.000
540:00:00.000
580:00:00
Cycle ID
Cap_Chg(Ah)
Cap_DChg(Ah)
Chg/DChg Efficien...
Engy_Chg(Wh)
79 2.1985 2.1957 99.875 8.6818
314 CCCV_Chg 3:09:46.900 2.1985
315 Rest 0:00:10.000 0.0000
316 CC_DChg 2:44:53.200 2.1957
317 Rest 0:00:10.000 0.0000
80 2.1977 2.1959 99.915 8.6791
318 CCCV_Chg 3:09:36.500 2.1977
319 Rest 0:00:10.000 0.0000
320 CC_DChg 2:44:53.700 2.1959
321 Rest 0:00:10.000 0.0000
81 2.1994 2.1977 99.923 8.6837
322 CCCV_Chg 3:09:29.400 2.1994
323 Rest 0:00:10.000 0.0000
324 CC_DChg 2:45:02.100 2.1977
325 Rest 0:00:10.000 0.0000
82 2.1992 2.1971 99.903 8.6835
326 CCCV_Chg 3:09:27.000 2.1992
327 Rest 0:00:10.000 0.0000
328 CC_DChg 2:44:59.200 2.1971
329 Rest 0:00:10.000 0.0000
83 2.1993 2.1960 99.847 8.6836
330 CCCV_Chg 3:09:34.700 2.1993
331 Rest 0:00:10.000 0.0000
332 CC_DChg 2:44:54.200 2.1960
333 Rest 0:00:10.000 0.0000
84 2.1974 2.1951 99.895 8.6770
334 CCCV_Chg 3:09:32.300 2.1974
335 Rest 0:00:10.000 0.0000
336 CC_DChg 2:44:50.200 2.1951
337 Rest 0:00:10.000 0.0000
85 2.1998 2.2051 100.242 8.6858
338 CCCV_Chg 3:09:23.900 2.1998
339 Rest 0:00:10.000 0.0000
340 CC_DChg 2:45:35.500 2.2051
341 Rest 0:00:10.000 0.0000
86 2.2093 2.2057 99.833 8.7122
342 CCCV_Chg 3:09:27.000 2.2093
343 Rest 0:00:10.000 0.0000



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