

FST-2000CT Battery Discharge Cycler



- Wide voltage range battery discharger: 2V to 96V
- Auto run multiple discharge/charge cycles
- 5.7 inch LCD touch screen for easy operation and showing various parameters real time
- Adjustable stop points and multiple alarm designs to control the discharge & charge process intelligently
- Support RS232 real time monitoring by PC or USB download data after discharge
- PC software for capacity evaluation and report generation
- Optional wireless & wired modules for 1.2V/2V/6V/12V cells voltage real-time measuring

OVERVIEW

FST-2000CT is a brand new type for traction batteries discharge & charge cycle. Usually, in periodic battery testing and the regeneration for bad performance batteries, FST-2000CT is a very intelligent and useful tool.

The voltage range of 2V –96V almost covers all types of traction batteries (forklifts, automobile, golf cart, train, wheel chair etc.)

TEST RANGE

FST-2000CT can support 2-96V battery groups, the application of FST-2000CT includes:

Battery Nominal Voltage	Max Discharge Current
2 V	60A
4 V	120 A
6/24 V	180 A
12/36/48 V	200 A
72/80/96 V	200 A

WORKFLOW

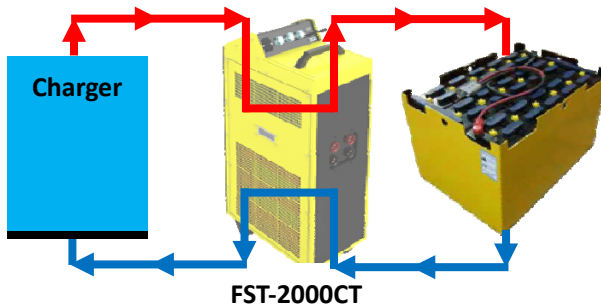
Connecting by power cables



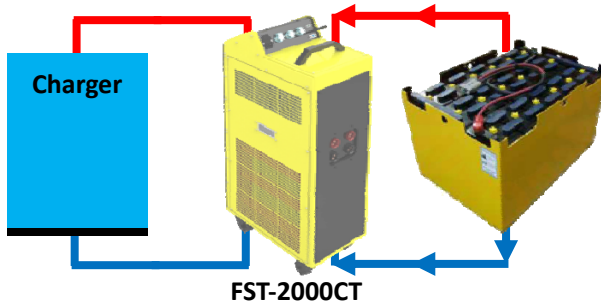
Input all key parameters

Cycle times	
Charge stop thresholds	Discharge stop thresholds
<ul style="list-style-type: none"> ● Charge time ● Capacity charged ● End current 	<ul style="list-style-type: none"> ● Discharge time ● Capacity discharged ● String voltage ● Cell voltage
Rest time between each steps	

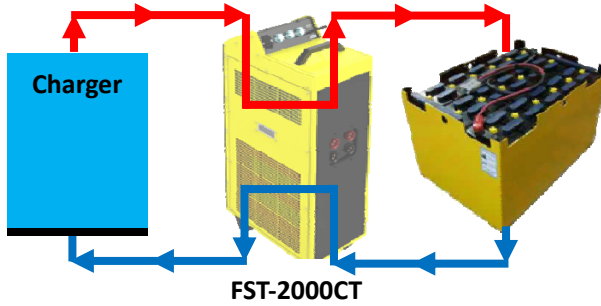
Cycle #0 – Charge



Cycle No. 1 – Discharge



Cycle No. 1 – Charge



Cycle No. 2– Discharge

Cycle No. 2– Charge



Cycle No. N– Discharge

Cycle No. N– Charge

FEATURES

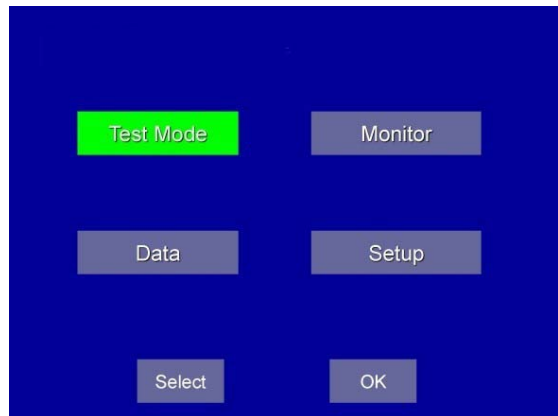
Multiple Adjustable Stop Points

FST-2000CT offers multiple adjustable points for test stop points to avoid excessive discharge & charge.

FST-2000CT also offer selectable quantity of cells which voltages below the stop point during discharge, this design could help you to locate more lag batteries in once constant discharging.

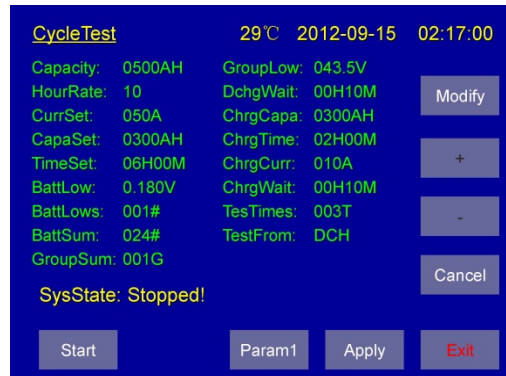
5.7 inch Touch LCD Display

Super big size touch LCD can display all real time data and graphs and support the click operations directly, humanized input method and menu designs simplified operating process.



Presetting Function

The presetting function for discharge & charge parameters provide 8 locations for setting up all discharge parameters in advance, this design can skip the setting procedures for the same cycles, simplified the operation and speed up the test.

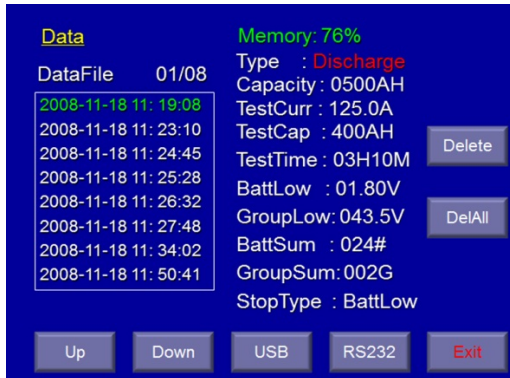


Internal Memory

- FST-2000CT can save several independent

discharge records automatically without Laptop monitoring, non-volatile internal memory guarantee the data security even in unexpected shutdown.

- The menu interface provides some management operations like reviewing, deleting, downloading to PC by USB disk or RS232.

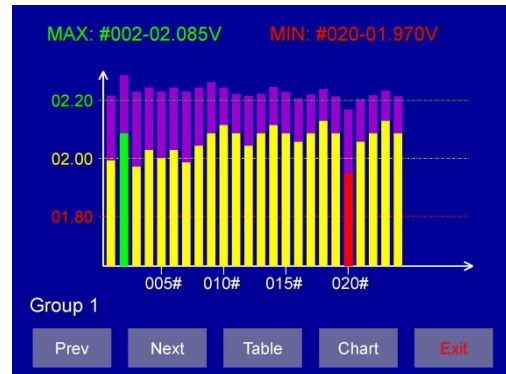


Optional wireless or wired cells voltage monitoring



- Wireless modules for cells voltage measuring are available for 1.2V/2V/6V/12V batteries voltage monitoring during testcycles.
- Each wireless module can monitor 4 batteries simultaneously. Compared with the traditional cable voltage measuring method that each module only can monitor 1 battery, the new wiring operation is much easier.
- With proper number wireless modules, main tester can real time scan and display the voltage data of each battery during the

discharging& charging, and display the histogram of all batteries to follow the battery voltage tracks in whole cycle process.



- Intelligent judge program: FST-2000CT can identify the situations that the battery voltages reach the threshold value or the signal missing by manual mistake. Avoiding manual interruption in the discharging, this revolutionary program makes the test stable and smooth.
- FST-2000CT also supports cable modules for special requirements.

Multiple Protections & Alarms

Malfunctions	LCD prompt	beep warning
Input over-voltage	✓	✓
Reverse polarity	✓	✓
Overload	✓	✓
Overheat	✓	✓

FST-2000CT provides ample protective measures for various abnormal situations during discharge. Automatic termination, LCD prompt and beep warning would assist users to make proper treatments.

PC ANALYSIS SOFTWARE

- Support data downloading and analyzing through real time communication or USB memory devices
- The software interface includes: battery voltages curve and bar chart, battery

resistances bar chart, group voltage curve, current curve, capacities histogram, data form and so on.



- Powerful capacity estimating function, the software can predict the capacity of each battery in the tested group.
- The software shows the data by various ways like bar charts, curve, and form. And users can magnify or minify any windows to read more details.
- Automatically create EXCEL data report, it's so convenient to send or download the data.

SPECIFICATIONS

Discharge Ranges

Voltage range	current range
1.6-2.5V	0-60A
3-6V	0-180A
6-120V	0-200A

Current measurement

Internal current range	0-200A
Accuracy & resolution	≤±0.5%, 0.1 A
External current range	0-600A(optional current clamp)
Accuracy & resolution	≤±1%, 0.1 A

Voltage measurement

Group voltage range	1.6-120V
Accuracy & resolution	≤±0.5%, 0.1 V
Cell voltage range	0-15V
Accuracy & resolution	≤±0.5%, 0.01 V

Power Supply

Power supply voltage	220 V AC (-20% to +30%) 110 V AC (optional)
Frequency	50/60 Hz
Power consumption	500W(max)

Communication & Storage

Communicate port	USB/RS232
Internal memory	8Mbit Flash

CE Certificate

LVD standards	2006/95/EC:EN 61010-1:200
EMC standards	2004/108/EC Annex II: EN 61000-6-1:2007 EN 61000-6-3:2007 EN 61000-3-2:2006+A2:2009 EN 61000-3-3:2008

Environment

Operation temperature	-5 to 50° C
Storage temperature	-40 to 70° C
Humidity	5% - 95% RH
Altitude	below 4000 m
Working noise	<60 dB

Dimensions & Weight

Main tester	294 x 502 x 1005 mm
Carrying case	314 x 522 x 1025 mm
Weight	55kg (main tester only) 100kg (included all accessories and carrying case) 0.3 kg (each optional wireless module)

Accessories

Carry case	1 x 314 x 522 x 1025 mm
Power cable	2 x 3 m cables 50 mm ²
AC power cord	1 x 3 wires x 1 mm ²
Software	1 x CD-ROM
RS232 wire	1
User manual	1
USB disk	1 x 4GB

Ordering Information

Type	Description
FST-2000CT	Battery discharge & capacity tester
IDCE-AS	PC analysis software
IDCE-200CC	200A current clamp
IDCE-600CC	600A current clamp
WX-2612	Wireless module for 2V/6V/12V
WX-12612	Wireless module for 1.2V/2V
YX-12612	cable module for 1.2V/2V/6V/12V