

## IDCE-960CT

# Battery Discharger & Capacity Tester



- For 6-600V DC battery groups discharge test
- 7 inch LCD touch screen for easy operation and showing various parameters real time
- 4 adjustable stop points and multiple alarm designs to control the discharge process intelligently
- Support RS485 real time monitoring by PC or USB download data after discharge
- PC software for capacity evaluation and report generation
- Optional wireless modules for 1.2V/2V/6V/12V cells voltage real-time measuring

### OVERVIEW

Although battery resistance testing methods are improving and very popular, battery discharge test still is the most accurate and reliable method for actual capacity evaluation of battery groups. Because only constant current discharge can perfectly simulate the working status under loading for batteries, power supply departments in many companies and utilities keep the periodic discharge testing in their maintenance management.

Because the DC power systems in various industrial utilities are using different voltage level battery groups (24V, 48V, 110V, 120V, 220V, 240V, 480V, 600V etc.), and most of professional users hope to find an unattended and automatic instrument to simplify discharge process, the battery discharge tester with intelligent designs and super voltage variability for almost all battery types would be preferable.

### FEATURES

#### Adjustable Current

IDCE-960CT can provide 0-220A (steps: 1A) adjustable current for different test

requests. During the test, the current will keep constant

#### IDCE-960CT

Battery Nominal Voltage	Max Discharge Current
6V	55A
12V	115 A
24V	185 A
48V	220 A
60V	220 A
110V	150 A
120V	140 A
220V	75 A
240V	70 A
480V	40 A
600V	40 A (24KWmax)

#### Multiple Adjustable Stop Points

IDCE-960CT offers 4 adjustable points for test stop points to avoid excessive discharge:

Stop Point	Setting Range
Group Low Voltage	0 - 600.0 V
Discharge Time	0 - 99 Hour 99 Min
Discharge Capacity	0 - 9999 AH
Cell Low Voltage	0 - 15.00 V

### 7 inch Touch LCD Display

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 parameters provide multiple locations for setting up all discharge parameters in advance, this design can skip the setting procedures for the same discharging, simplified the operation and speed up the test.



### Internal Memory

- IDCE-960CT 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 RS485.

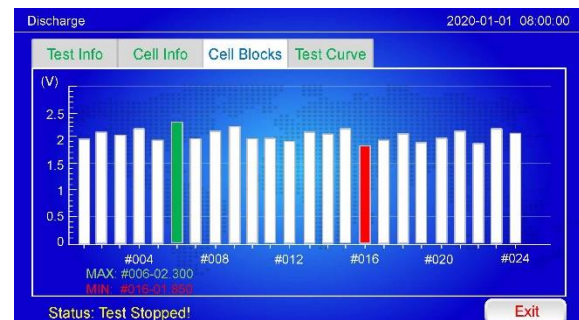


### Optional wireless cells voltage monitoring

- Wireless modules for cells voltage measuring are available for 1.2V/2V/6V/12V batteries voltage monitoring during discharge test.
- 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, and display the histogram of all batteries to follow the battery voltage tracks in whole discharging process.



- Intelligent judge program: IDCE-960CT 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.
- IDCE-960CT also supports wired modules for special requirements.



### Multiple Protections & Alarms

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

IDCE-960CT provides ample protective measures for various abnormal situations during discharge. Automatic termination, LCD prompt and beep warning would assist users to make proper treatments.

### Extendable & Compatible

Connecting with clamp current, IDCE-960CT cooperate other types in IDCE-CT series or any other load units, and clamp current can count external current in.

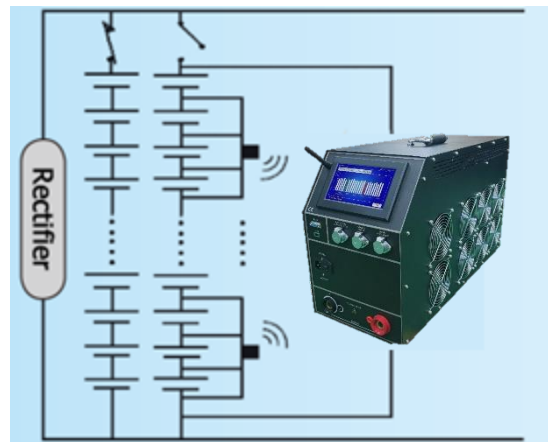
### PC ANALYSIS SOFTWARE

- 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.

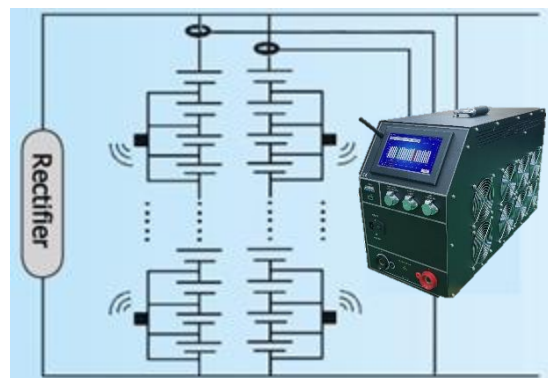
- Powerful capacity estimating function, the software can predict the capacity of each battery in the tested group.
- The software shows the data by various ways like bar charts, curve, and form. And users can magnify or minify any windows to read more details.
- Automatically create EXCEL data report,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

### TYPICAL APPLICATIONS

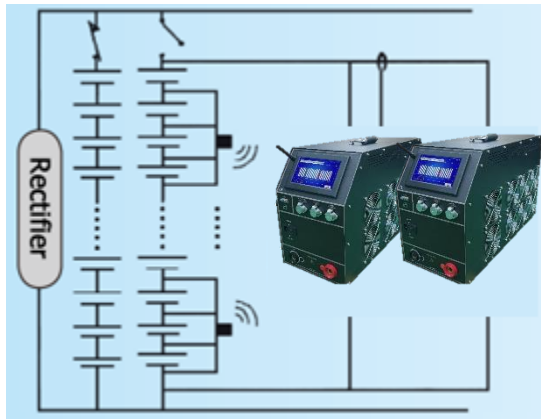
#### Single unit for 1 battery group



#### Single unit for 2 battery groups



**Parallel co-work for 1 battery group**



**SPECIFICATIONS**

**Discharge Ranges**

Voltage range	current range
6-650V	0-220 A

**Current measurement**

Internal current range	0-300A
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	0-650 V
Accuracy & resolution	≤±0.5%, 0.1 V
Cell voltage range	0-15V
Accuracy & resolution	≤±0.5%, 0.01 V

**AC Power Supply**

Power supply voltage	220 V AC (-20% to +30%)
Frequency	50/60 Hz
Power consumption	300W(max)

**Communication & Storage**

Communicate port	USB/RS485
Internal memory	8GB 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	675x265x412 mm
Carrying case	850x500x350 mm
Weight	28 kg (main tester only) 50 kg (included all accessories and carrying case) 0.3 kg (each optional wireless module)

**Accessories**

Carry case	1 x 850x500x350 mm
Power cable	2 x 3 m cables 50 mm <sup>2</sup>
AC power cord	1 x 3 wires x 1 mm <sup>2</sup>
Software	1
RS485 wire	1
User manual	1
USB disk	1 x 16GB