DFT-6300 Battery Load Bank

1. Overview：

- The battery Load Bank as discharge monitor is specially designed for the battery string for verification discharge experiments, capacity tests, and daily maintenance of battery strings, engineering acceptance and other tests of DC power supply load capacity. Using the latest wireless communication technology, the battery discharge process can be monitored in real time through the PC monitoring software, and the discharge process of each battery can be monitored.
- The power consumption part of the tester adopts the new PTC ceramic resistor as the discharge load, which completely avoids the red hot phenomenon, and is safe and reliable without pollution. The whole machine is controlled by a microprocessor, LCD display, and English menu. The design is novel, small in size, light in weight and easy to move. After the various discharge parameters are set, the entire constant current discharge process is automatically completed. Fully intelligent. Make the entire discharge process safer.
- The portable and intelligent professional design of the tester series makes the discharge test work simple and easy, greatly reduces the labor intensity of professional maintenance personnel, and also improves the scientific and intelligent discharge test.

2. Functions description

Function 1: Check-in discharge

It can perform a check-rated capacity test on the battery string, continuously set the discharge current, discharge the constant current according to the set discharge current, monitor the voltage of the battery string and each battery during the discharge process, and measure the capacity of the single cell battery and the battery string.

Accommodates a variety of battery voltages: 1.2V, 2V, 4V, 6V, 12V

Setting of various discharge stop conditions:

- The total voltage of the battery string
- Single battery voltage
- Discharge time
- Discharge capacity

Function 2: Compensated discharge

Online compensatory discharge can be performed, and the battery in the online operation can be discharged by connecting an external current clamp sensor.

Function 3: fast discharge

This equipment can use 1 hour of rapid discharge, which is used to quickly test the discharge capacity of the battery string and quickly judge the performance and capacity of the battery.

Function 4: Continuous discharge

Also known as breakpoint recovery, the discharge monitor can also divide the discharge work into different working days to facilitate the staff's time arrangement.

Function 5: All of the above discharge processes can realize the suspension of discharge, or continue to discharge after suspension.

Function 6: online monitoring

Automatically monitor the battery string voltage and discharge current online, record the discharge capacity of the battery, manually select and monitor the battery voltage, choose to ensure the judgment of the battery state, and store the monitoring data according to the set conditions. Achieves:

- Charging voltage monitoring
- Discharge + charging monitoring
- Single body inspection and monitoring

Function 7: wireless function

- The single battery voltage is transmitted through wireless transmission. Saves the hassle of wiring.
- The total voltage of the battery string adopts wireless transmission mode for data transmission.
- 3, discharge process monitoring, the use of wireless communication terminals to transmit battery discharge data in real time to the computer management software, real-time view of the discharge process data and automatic saving.

Function 8: Current monitoring function (optional)

In the event of power failure / actual load discharge, the single battery voltage, battery string voltage and discharge current are automatically monitored online, and the discharge capacity of the battery is recorded to ensure the judgment of the battery state.

Function 9: Data management function

Perfect computer management analysis and monitoring software, with powerful data processing functions, the use of advanced mathematical models, the battery of a number of measurement results for comprehensive analysis, accurate judgment of battery performance, and can query the real-time operating status of the battery and historical data, including various parameters, curves and automatically generate reports.

3. Product features

- Adopt PTC ceramic resistance, which avoids the phenomenon of red heat and makes the whole discharge process safer.
- 2, with wireless communication function, wireless collection box and discharge host and upper monitoring PC host through wireless communication, simplify wiring, flexible and convenient.
- The wireless collection box can monitor each battery to achieve complete monitoring of the discharge process of the battery string.
- The PC monitoring system equipped with it can monitor the entire discharge process in real time, and analyze the total voltage, discharge current and battery voltage of each unit monitored, and generate corresponding data reports.
- There is a USB interface, which can store the data of the discharge process into a U-disk and import it to the PC. PC data management software analyzes the process of battery discharge and generates corresponding data reports.
- Intelligent microcontroller ARM control, LCD display in Chinese and English. The menu operation is simple and straightforward.
- Test/discharge termination conditions can be set, including single battery voltage, battery string termination voltage, discharge current, and discharge time.
- The capacity of the battery string can be estimated by short-term discharge (1 hour).
- The test/discharge process can be recorded, mainly the total capacity of the battery string, the total voltage, the total current and the voltage change of the single battery with the lowest voltage.

4. Technical indicators

Model	Discharge current	Battery String voltage	Discharge end voltage	Power supply	Size (mm)	Weight
48V150A	0～150A	DC48V	10～60V adjustable	AC220±15% DC48V	410×197×273	9kg
48V200A	0～200A				570×200×360	17.8kg
48V300A	0～300A				582×200×430	26kg
220V30A	0～30A	DC220V	176～275V adjustable	AC220±15% DC220V	410×197×273	9kg
220V50A	0～50A				570×200×360	17.8kg
220V100A	0～100A				582×200×430	26kg
110V30A	0～30A	DC110V	98～121V adjustable	AC220±15% DC110V	410×197×273	9kg
110V80A	0～80A				410×197×273	9kg
110V100A	0～100A				570×200×360	17.8kg
380V20A	0～20A	DC380V	304～456V adjustable	AC220±15% DC380V	570×200×360	17.8kg
380V50A	0～50A				582×200×430	26kg
380V100A	0～100A					kg
80V～482V20A	0～20A	DC80V ～482V	80～482V adjustable	AC220±15% DC80 ～482V		kg
80V～482V50A	0～50A					kg
80V～482V100A	0～100A					kg
single battery Detection	2V、4V、6V、12V、other voltages can be customized					
Measurement accuracy	Voltage：0.5% Current：1%					
Communication interface	Data storage: USB parallel communication WI-FI					
sampling interval	5s～1min					
Heat dissipation method	Forced air cooling					
environment	Temperature 0℃～50℃ Humidity 5%～90%					
Screen size	TFT-5’ color LCD					
Storage capacity	16M					

Note: the size of the discharge tester current and voltage can be specially customized according to user needs,