



Battery Load Bank 840



Battery discharge tester mainly used in all kinds of voltage Lead-acid battery which is used in DC power industry and UPS

Have battery capacity assessment, online monitoring function, integration degree is high, volume is small, function is perfect, wide voltage range

It is suitable for a variety of battery voltage range. Support constant current discharge, constant power discharge mode.

Batteries in power plants, transformer substations, Telecom company and Force communications must provide the equipment they serve with standby power in the event of a power failure.

Unfortunately, however the capacity of such batteries can drop significantly for a number of reasons before their calculated life expectancy is reached. This is why so important to check batteries regular intervals, and the only reliable way of measuring battery capacity is to conduct a discharge test.

OR-840 –Utility is used for battery systems range from 10-300V, Discharge can take place at up to 120Amps, and if higher current is needed, two or more OR-840 units can be linked together.

Different discharge current range

String Voltage	220V
Discharge current Range	10-30V 0-60A
	30V-60V 0-120A
	60V-144V 120A
	144V-288V 60A



General sketch



- Used to discharge to battery string removed from the system
- Discharge to Battery string voltage as 12V/24V/48V/110V/220V, Cell voltage as 1.2V/2V/6V/12V
- 4 adjustable stop points and multiple alarm designs to control the discharge process intelligently
- 7inch LCD touch screen for easy operation and showing various parameters real time
- Support **RS232** real time monitoring by PC or **SD Card** 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
- On-line monitoring function:

Monitor setting		18.1℃	33%	10-30-2015	16 31
Setting information					
RoomNo	0001	StringNo	01	StringNum	1
StringType	10V-30V	CellType	2V	CellNum	24
NominalCap	10V-30V	CellOrder	From -	TestTime	10:00(H:M)
	30V-60V	Alarm-condition			
	60V-144V			UMinString	
	144V-288V			43.20V	
	UMaxCell			UMinCell	
	2.400V			1.800V	
	OK			ESC	

Prompt:The touch screen. please click.



Online monitoring for battery string: when the battery pack is under the state of online discharge, uniform charge and floating charge, perform real-time online monitoring for all cells. The monitoring includes string voltage, cell voltage, charge/discharge current, monitoring time of battery string, charge/discharge capacity of battery

● Discharge function:

Discharge setting					
		18.8v		49%	
10-18-2015 09:30					
Setting information					
RoomNo	0001	StringNo	01	StringNum	1
StringType	30V-60V	CellType	2V	CellNum	24
NominalCap	100Ah	CellOrder	From -	Dis.Method	Const-I
Dis.H.R	10h			I-Descarga	10.0A
Condic.Fin.Prueba					
UMinString	43.20V	UMinCell	1.800V		
CellTotal	2	CellVolt.	Alarm		
C-Discharge	100Ah	T-Discharge	10:00(H:M)		
OK			ESC		

Prompt:The touch screen. please click.

Perform discharge of constant current taking advantage of intellectualized dummy load after the battery pack is removed from system,set up the parameters of “discharge current”、“discharge time”、“discharge capacity”、“final protective voltage of whole pack”and“ final protective voltage of cell”, and the tester could carry out discharge function automatically, display discharge current, battery discharged capacity、the whole pack voltage, cell voltage, discharge time and etc at real time;

Multiple Adjustable Stop Points

OR-FDY 840 offers 4 adjustable points for shutdown points to avoid excessive discharge:

Stop Point	Setting Range
String Voltage	0 - 300 V
Discharge Time	0 - 99 Hour 99 Min
Discharge Capacity	0 - 1200 AH
Cell Low Voltage	0 - 15.00 V

OR-840 provides 3 discharge modes for different test requirements:

Discharge Mode	Range
Constant Current	0 - 120 A
Constant Power	0 - 15 Kw
Constant resistance	0.16Ω - 300Ω



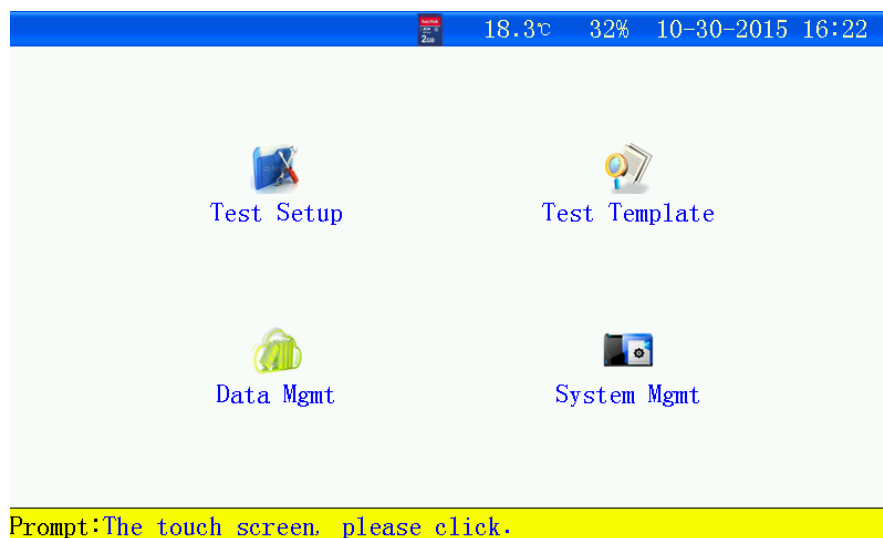
- Battery String voltage is 12V/24V/48V/110V/220V and single battery voltage is 2V/6V/12V.

Users can decide how to set single battery voltage

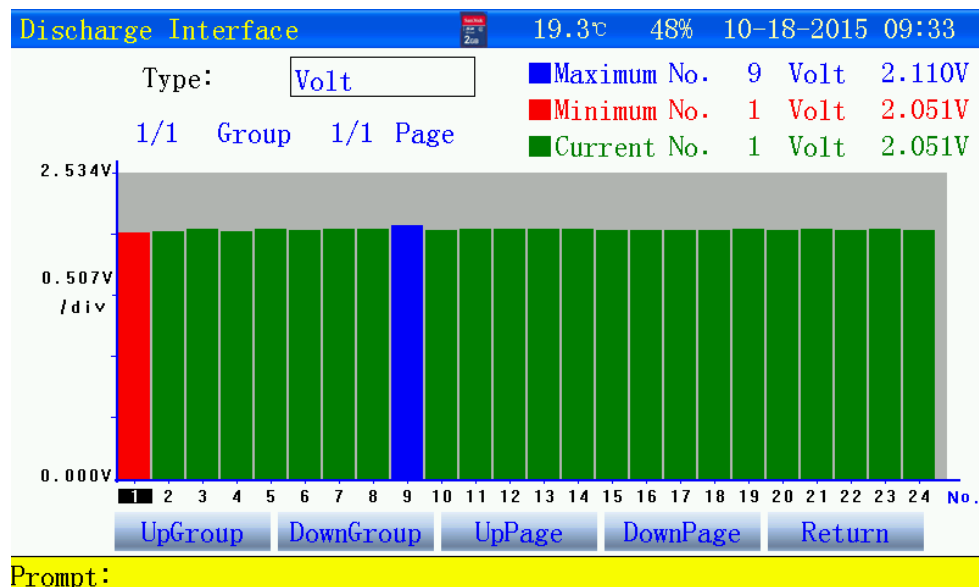
- When we do confirmation test we can set four condition of stopping discharging:

①Stop voltage of whole set battery ②Single battery voltage stop;

③Stop discharging time ④Discharging voltage



- Easy to operate: All input is simple English menu, humanized operation, clear procedure, every step and interface will give user brief tips avoid incorrect operation fundamentally





- Mature correspondence function, including RS232 communication port and SD card connection port. Data will be transferred to PC begin the storage management. It can analyze
- and store historical data in long time; It's convenient, reliable and safe if we transfer data via SD card
- Tester host integrated monitoring part and power part together, and power part adopted latest hi-efficiency components
- Adopted new special low-heat hi-efficiency loading material and advanced control technology ensure the higher constant current precision.
- It can be hung and used for any large volume battery to test the actual volume
- Providing data management, print, analyze, count report, automatic generate test report. Amplify or minify the voltage curve for easy observation.

Room: 00001(J0001-01-110104153058.CFJ)

Test InformationTest ChartCell ConstrastSolution

RoomBattery

Room And Battery Information

RoomNo0001RoomName00001PackNo01PackType48VCellType2VCnormal100AhPackNum1CellNum24CconnectFrom -

Monitor ParamsSetTime0Hr1MinUpackuplimit56.50V

CdID1Upack49.68VCap.0.0AhTime_i0:00:00Ipac0.0AUbus55.94V

1PackU:01-122.0692.0662.0662.0652.0712.0692.0672.0662.0682.0662.0742.071U:13-242.0722.0702.0652.0692.0742.0682.0702.0772.0732.0712.0672.073

CdID2Upack49.68VCap.0.0AhTime_i0:01:00Ipac0.0AUbus55.93V

1PackU:01-122.0682.0662.0662.0652.0712.0692.0672.0662.0682.0662.0742.071U:13-242.0722.0702.0652.0692.0742.0682.0702.0772.0732.0712.0672.073

The auto-test and protection function: During test if we find whole battery set or single battery have any problem test will stop automatically to avoid any further damage and completely prevent shock on the device; test can be cut off according to actual condition as well

After test all test result will be displayed automatically and according to these data advise maintenance point



Specification

Features		Specifications			
String Voltage measurement range	10V-30V	30V-60V	60V-144V	144V-288V	
String Voltage Resolution	0.01V				
Voltage measurement accuracy	0.5%				
Constant Power adjustable range	600W-18000W				
Discharge current Range	1-60A	1-120A	1-120A	1-60A	
Discharge current control accuracy	0.1A				
Current Measurement resolution	1%				
Cell voltage measurement type	1.2V/2V: 0-4V; 6V:0-8V; 12V: 0-15V				
Cell Voltage measurement range	Adopt Bluetooth wireless module, it can also monitor 1-24 battery strings, the quantity of each string is not limit, one module can monitor 24cells				
Cell Voltage resolution	0.01V				
Work Voltage	Single-phase three wire system 220VAC \pm 15% 50Hz/60Hz				
High-Voltage insulation test	Input-The enclosure: 2200Vdc 1min Input-Output: 2200Vdc 1min Output- The enclosure: 700Vdc 1min				
Safety standard	EN610950				
Cooling mode	Forced Air Cooling				
Communication mode	RS232 communication and SD Card save				
Display	7inch Touch screen				
Work Temp.	-5 \sim 50 $^{\circ}$ C				
Storage Temp.	-40 \sim 70 $^{\circ}$ C				
Humidity	0 \sim 90% (40 \pm 2 $^{\circ}$ C)				
Noise	< 60dB				
Altitude	Rated Altitude 4000m				
Heat Dissipation	Forced Air Cooling				
Dimensions	850x560x530mm				
Weight	<20K				



西安欧瑞电器技术有限公司
OREN ELECTRICAL TECHNOLOGY CO., LTD.

Email:sales@oren-electric.com

<http://www.oren-electric.com>

Packing list

No.	Name	Qty.	Unit	Remark
1	OR-FDY840	1	Unit	
2	220VAC Power cord	1	PC	
3	Discharge cable (Red+; Black-)	2	PC	
4	String voltage collection line	1	SET	
5	Cell voltage monitoring module	5	PC	
6	Cell voltage collection line	5	SET	
7	Module power cord	5	SET	
8	433Antenna	5	PC	
9	Touch Pen	1	PC	
10	SD Card	1	SET	
11	User Manual	1	PC	
12	Manufacturer certificate	1	PC	
13	Alloy carrying case	1	PC	
14	Packing list	1	PC	

