9841

Battery Charge and Discharge Test System

AUTOMATIC TEST EQUIPMENT (ATE)

PRODIGIT
INSTRUMENT PROFESSIONAL

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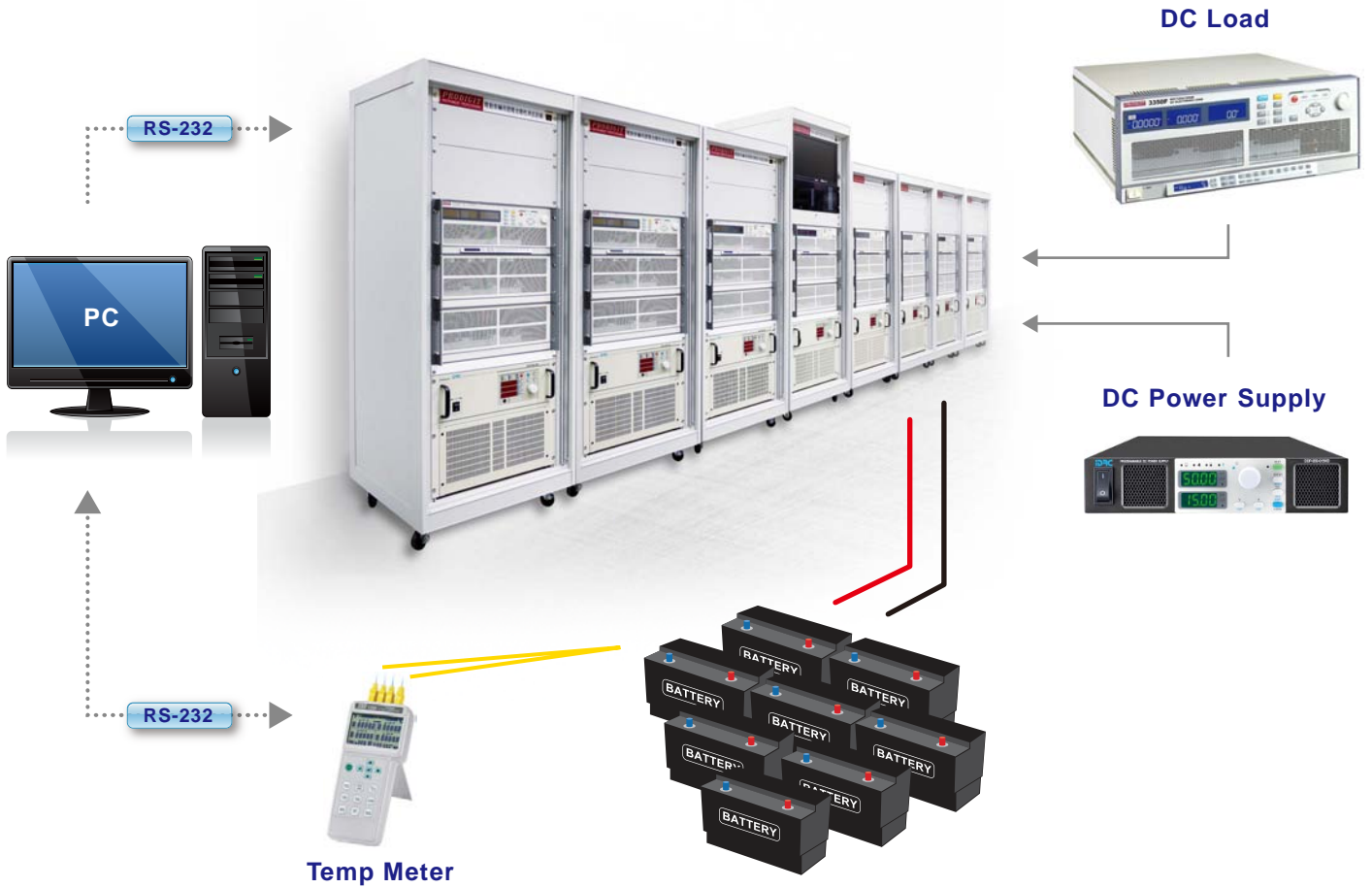# 9841 Battery Charge and Discharge Test System

Features

- Charge Test
- CP-Charge Test
- Discharge Test
- Capability Test (AH)
- Power Consumption Test (KWH)
- Cycle Life Test

Descriptions

- Provide user define Test Step
- Easy user interface
- Measure Voltage, Current, Power, KWH, AH, Temperature, Reference Voltage
- Accuracy Measure Time
- Easy to see now test progress
- Can cycle test
- Provide Charge, Discharge, Suspend, FOR, LOOP Mode Select

- When Charging, set the stop current to stop charging when fully charged so as to avoid overcharging that will damage the battery. When Discharge, set the stop voltage to stop discharge when discharging to lowest so as to avoid over-discharging that will damage the battery.
- The test result will be stored to ACCESS data
- The test result will be saved to EXCEL CSV format
- When test result data are excess 32000 data, it will be separated automatically during transfer to EXCEL file
- The maximum test procedures you can set are up to 100.

RS-232

PC

DC Load

DC Power Supply

RS-232

Temp Meter

Test Example

The Start Screen

Prodigit 9841-01 電動車輛用鋰電池電性測試系統 R1.0

Addition Step - Channel 1
Action Mode : Charge
Charge Setup
Charge Voltage : 0 V
Charge Current : 0 A
Stop Time : 0 Minutes
Stop Current : 0 A
Stable Time : 0 Seconds
OK
Cancel

Modify Channel - 2 Step - 3
Action Mode : Suspend
Suspend Setup
Suspend Time : 0.1
OK
Cancel

Modify Channel - 3 Step - 4
Action Mode : DisCharge
DisCharge Setup
DisCharge Mode : CC
DisCharge Current : 0.1 A
Stop Time : 1 Minutes
Stop Voltage : 0 V
Stable Time : 1 Seconds
OK
Cancel

Modify Channel - 5 Step - 1
Action Mode : FOR
FOR Setup
Times : 250
OK
Cancel

Modify Channel - 4 Step - 2
Action Mode : CP-Charge
CP-Charge Setup
Charge Power : 30 W
Charge Current : 1 A
Stop Time : 1 Minutes
Stop Current : 0.1 A
Stable Time : 1 Seconds
OK
Cancel

Modify Channel - 6 Step - 6
Action Mode : LOOP
LOOP Setup
OK
Cancel

System Setup

System Setup
Test Channel Count : 8
Temperature Meter Count : 4
Device 1 COM : 18
Device 2 COM : 19
Device 3 COM : 20
Device 4 COM : 21
Save
Cancel

Connection Setup - Channel 1

Load - COM : 02 ▼   BaudRate : 115200 ▼

Power - COM : 14 ▼   BaudRate : 115200 ▼

OK

Temperature CH -
☑ 01 ☑ 02 ☐ 03 ☐ 04
☐ 05 ☐ 06 ☐ 07 ☐ 08
☐ 09 ☐ 10 ☐ 11 ☐ 12
☐ 13 ☐ 14 ☐ 15 ☐ 16

Cancel

Start Test

Channel - 1 - Load Error

Step	Action Mode	Mode / Volt	Value	StopTime(m)	StopValue	Stable(s)
1	FOR				1500	
2	Charge	3.3	2.3	0.1	0	1
3	Suspend			0.1		
4	DisCharge	CC	2.3	0.1	0	1
5	Suspend			0.1		
6	LOOP					

SN. : 201108291

Measurement Item
☑ Voltage ☑ KWH
☑ Current ☑ AH
☑ Power   ☑ Temperature

Measure Time : 1   S

Review test data

Channel - 1

Step	Action Mode	Mod
1	FOR	
2	Charge	
3	Suspend	
4	DisCharge	
5	Suspend	
6	LOOP	

Measurement Value
2011-08-29 15:43:59

Voltage 3.28862   Temperature
Current 0.10975   25.2 25.4
Power 0.3609260
KWH .36097357
AH .17764000

SN. : 201108291

Measurement Item
☑ Voltage ☑ KWH
☑ Current ☑ AH
☑ Power   ☑ Temperature

Measure Time : 1   S

Review test records

Prodigit CSV Viewer MainForm

Select CSV File   0   0

CSV Information

Filter
Action : ▼   Time Range : MAX   ☐ Cycle View
                          MIN   Show Count : 1

Log Count : 0

X - Scale   Y - Scale   Sub Y - Scale
Max MAX   Max MAX   Max MAX
Min MIN   Min MIN   Min MIN

Print Wave

View

Real time monitoring the test waveform