

9841

電池充放電測試系統



AUTOMATIC TEST EQUIPMENT (ATE)



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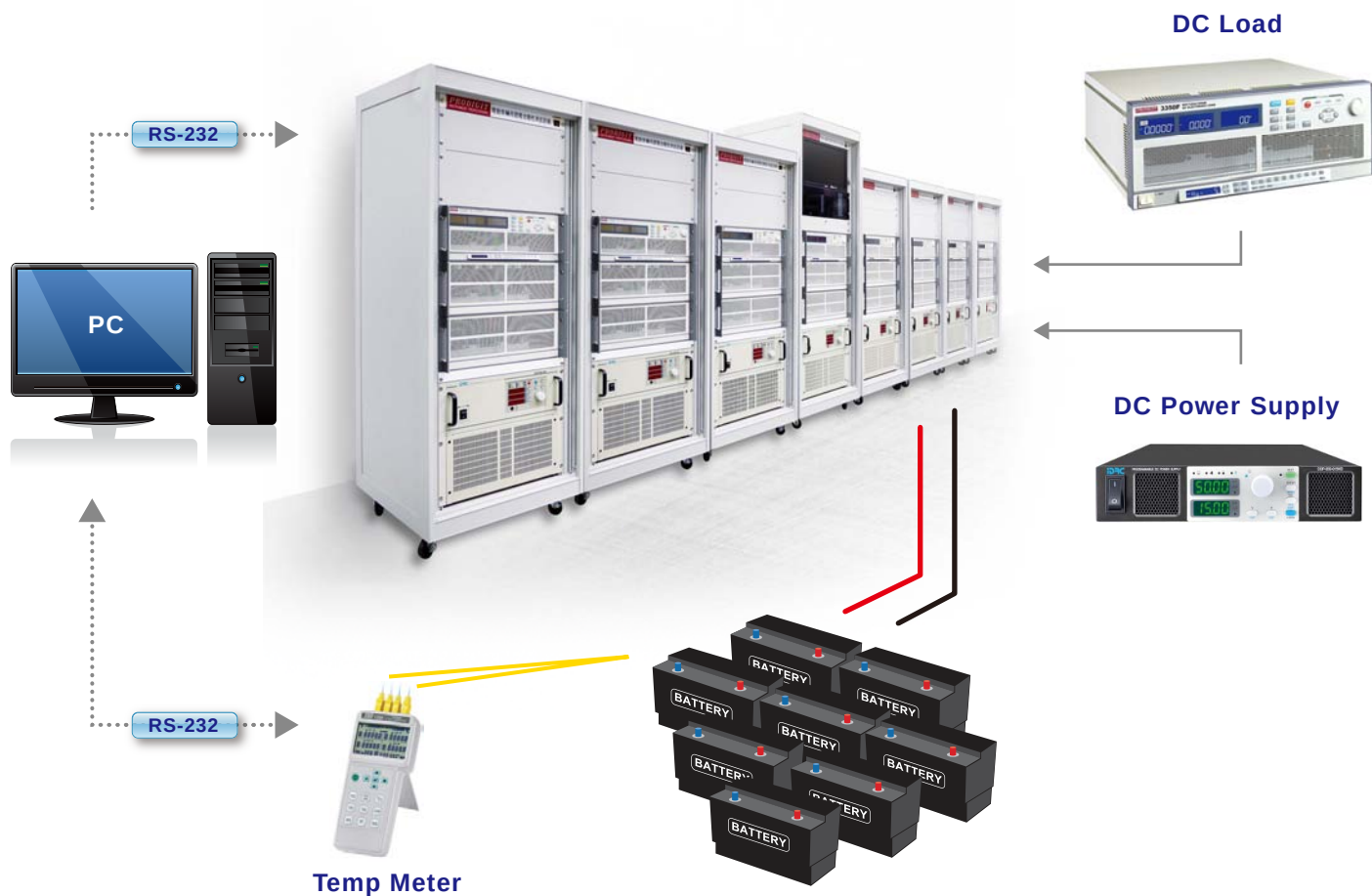
特 性

- Charge充電測試
- CP-Charge充電測試
- DisCharge放電測試
- 容量測試 (AH)
- 耗電量測試 (KWH)
- 循環壽命測試

功 能 說 明

- 充電電壓(V)、電流(A)、功率(W)，依實際應用規劃
- 放電電壓(V)、電流(A)、功率(W)，依實際應用規劃
- 提供使用者自行編輯測試步驟
- 可量測電壓、電流、功率、KWH、AH、溫度，且測試時可輕易的看出目前測試進度，並提供循環測試功能
- 提供Charge、DisCharge、Suspend、FOR、LOOP等模式選擇，各個模式有相對的設定方法，易於設定
- Charge時設定停止電流，可以在充飽時停止充電，避免過度充電導致電池損壞
- DisCharge時設定停止電壓，可以在放電到最低時停止放電，避免過度放電讓電池損壞
- 可設定100個以上測試步驟並可將測試結果存EXCEL CSV格式檔
- 可設定循環測試1000次以上。

硬體架構



測試範例

起始頁面

Prodigit 9841-01 電動車輛用鋰電池電性測試系統 R1.0

Channel - 1

Step	Action Mode	Mode / Volt	Value	StopTime(m)	StopValue	Stable(s)
1	Suspend			1		
2	DisCharge	CC	2.3	60	0	1
3	Suspend			1		

SN: [201108221]
Measurement Item:
☒ Voltage ☒ KWH
☒ Current ☒ AH
☒ Power ☒ Temperature
Measure Time: [3] S

Channel - 2

Step	Action Mode	Mode / Volt	Value	StopTime(m)	StopValue	Stable(s)
1	FOR			100		
2	Charge	1	0.1	1	0	1
3	Suspend			0.1		
4	DisCharge	CC	0.1	1	0	0
5	Suspend			0.1		
6	LOOP					

SN: [201108222]
Measurement Item:
☒ Voltage ☒ KWH
☒ Current ☒ AH
☒ Power ☒ Temperature
Measure Time: [10] S

Channel - 3

Step	Action Mode	Mode / Volt	Value	StopTime(m)	StopValue	Stable(s)
1	FOR			500		
2	Charge	1	0.1	1	0	1
3	Suspend			0.1		
4	DisCharge	CC	0.1	1	0	1
5	Suspend			0.1		
6	LOOP					

SN: [201108223]
Measurement Item:
☒ Voltage ☒ KWH
☒ Current ☒ AH
☒ Power ☒ Temperature
Measure Time: [10] S

Channel - 4

Step	Action Mode	Mode / Volt	Value	StopTime(m)	StopValue	Stable(s)
1	FOR			250		
2	Charge	1	0.1	1	0	1
3	Suspend			0.1		
4	DisCharge	CC	0.1	1	0	1
5	Suspend			0.1		
6	LOOP					

SN: [201108224]
Measurement Item:
☒ Voltage ☒ KWH
☒ Current ☒ AH
☒ Power ☒ Temperature
Measure Time: [10] S

Channel - 5

Step	Action Mode	Mode / Volt	Value	StopTime(m)	StopValue	Stable(s)
1	FOR			250		
2	Charge	1	0.1	1	0	1
3	Suspend			0.1		
4	DisCharge	CC	0.1	1	0	1
5	Suspend			0.1		
6	LOOP					

SN: [201108225]
Measurement Item:
☒ Voltage ☒ KWH
☒ Current ☒ AH
☒ Power ☒ Temperature
Measure Time: [10] S

Channel - 6

Step	Action Mode	Mode / Volt	Value	StopTime(m)	StopValue	Stable(s)
1	FOR			250		
2	Charge	1	0.1	1	0	1
3	Suspend			0.1		
4	DisCharge	CC	0.1	1	0	1
5	Suspend			0.1		
6	LOOP					

SN: [201108226]
Measurement Item:
☒ Voltage ☒ KWH
☒ Current ☒ AH
☒ Power ☒ Temperature
Measure Time: [10] S

Channel - 7

Step	Action Mode	Mode / Volt	Value	StopTime(m)	StopValue	Stable(s)
1	FOR			250		
2	Charge	1	0.1	1	0	1
3	Suspend			0.1		
4	DisCharge	CC	0.1	1	0	1
5	Suspend			0.1		
6	LOOP					

SN: [201108227]
Measurement Item:
☒ Voltage ☒ KWH
☒ Current ☒ AH
☒ Power ☒ Temperature
Measure Time: [10] S

Channel - 8

Step	Action Mode	Mode / Volt	Value	StopTime(m)	StopValue	Stable(s)
1	FOR			250		
2	Charge	1	0.1	1	0	1
3	Suspend			0.1		
4	DisCharge	CC	0.1	1	0	1
5	Suspend			0.1		
6	LOOP					

SN: [201108228]
Measurement Item:
☒ Voltage ☒ KWH
☒ Current ☒ AH
☒ Power ☒ Temperature
Measure Time: [10] S

新增測試步驟

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

系統設定

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

連線設定

Connection Setup - Channel 1

Load - COM : BaudRate :

Power - COM : BaudRate :

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

OK Cancel

啟動測試

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

MeasureTime : 1 S

檢視量測數據

Channel - 1

Measurement Value

2011-08-29 15:43:59

Voltage 3.28862 Temperature 25.2 25.4

Current 0.10975

Power 0.3609260

KWH .36097357

AH .17764000

SN : 201108291

Measurement Item

☒ Voltage ☒ KWH

☒ Current ☒ AH

☒ Power ☒ Temperature

MeasureTime : 1 S

檢視已完成測試記錄

Prodigit CSV Viewer MainForm

Select CSV File

Filter

Action : Time Range : ☐ Cycle View

Show Count : 1

X - Scale Y - Scale Sub Y - Scale

Max MAX Min MIN

Max MAX Min MIN

Max MAX Min MIN

CSV Information

Log Count : 0

Print Wave

View

描繪記錄波形

