Combining DC regulated power supply and electronic load device, charge / discharge test is easily started with LinkVIeW.

GW Instek introduces LinkVIeW software to allow users to quickly set test instruments for the operation of charging and discharging tests on battery and super capacitor, etc. Users can define charging and discharging procedures to automatically execute procedures so as to obtain measurement results. History graphs are available and they can be exported to Excel for further analysis.

● Test Image

## The Automatic charging and discharging test of Energy Storage Device

LinkVIeW
Up to 12 channels

※1 Interface setting depend on the each model.

USB, LAN, GP-IB, RS-232 ※1

CH1
Charge
DC Source
OUTPUT ON/OFF

Discharge
DC Load
LOAD ON/OFF

CH2
Charge
DC Source
OUTPUT ON/OFF

Discharge
DC Load
LOAD ON/OFF

CH3
Discharge
DC Load
LOAD ON/OFF

CH12
Charge
DC Source
OUTPUT ON/OFF

Battery

Capacitor

Battery

DUT
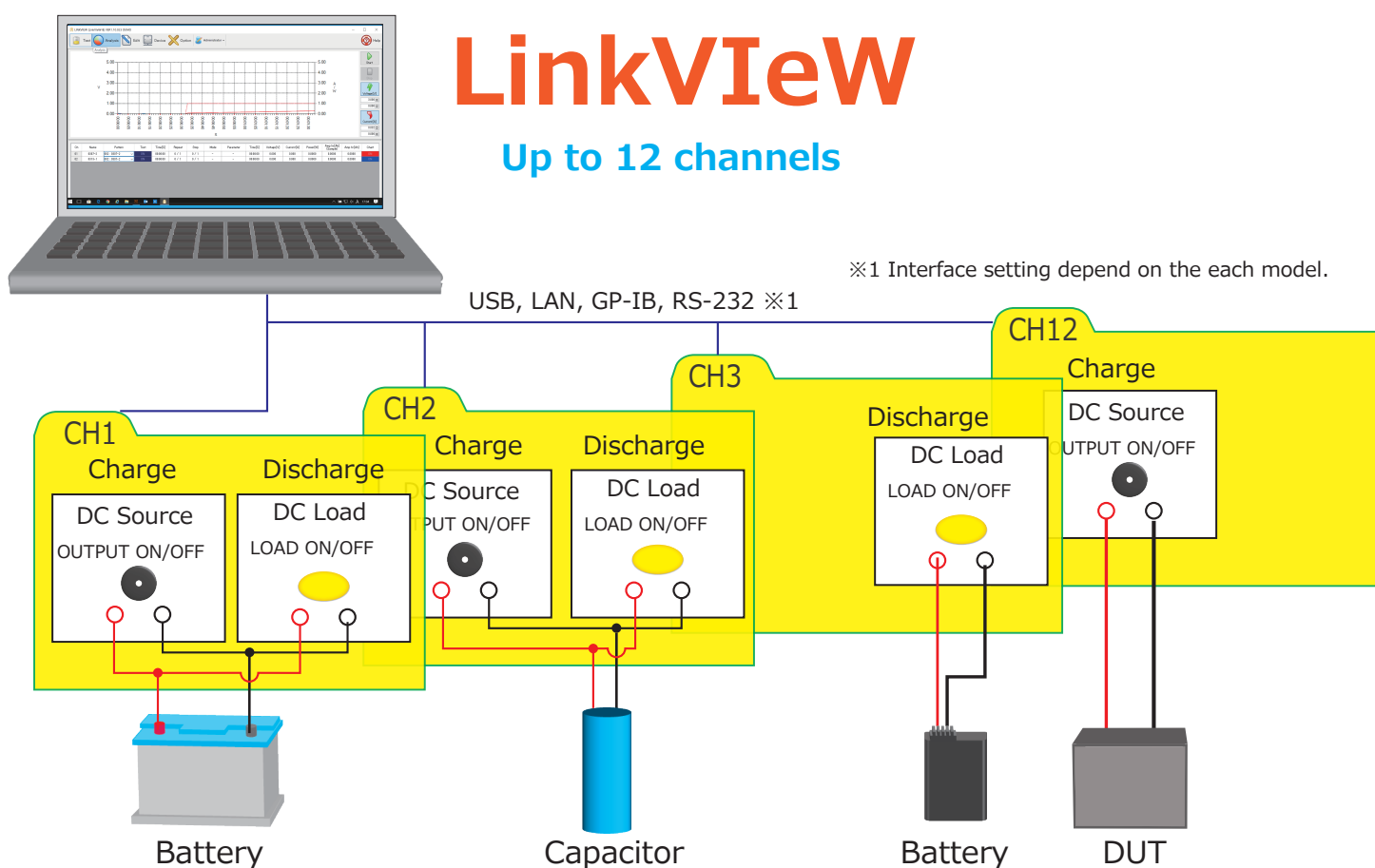
● Feature

✔ Easily expand capacity.

○ **Long Term Power Monitoring of I, V, P(W)**

○ **Create/define operation sequence for controlling Source/Load behavior.**

○ **Simultaneously run test sequence of each channel and data logging**

○ **Data Analyzer:**

○ **VIeW chart: support Zoom In/Tracking of Samples**

○ **VIeW table: summaries testing result for VIeW and also each step including Voltage/Current/Power/VMax/Imax/PMax/AmpHour**

○ **Live Data Monitoring:**

○ **VIeW: Self-defined display range/offset adjustable**

○ **Controllable displayed Grapf setting**

GW INSTEK
Simply Reliable

● Device Setting (Channel setting)

Edit channel: You can select used devices for each channels at 'Edit' button in the tool bar.

You can also set from One channel up to Twelve channels.

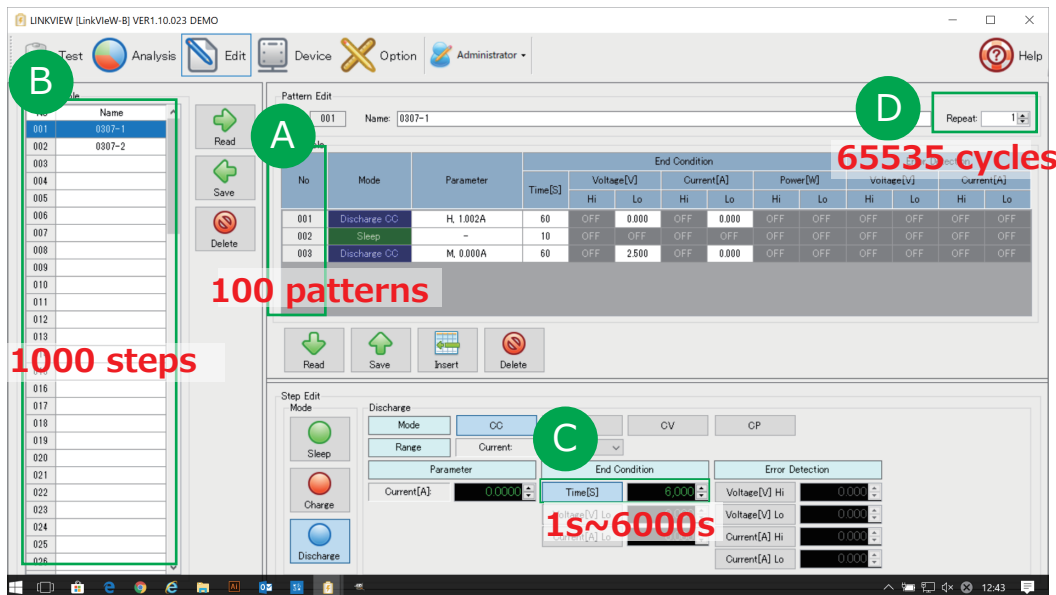* 'Channel' also can consist one Power supply or one Electronic Load.
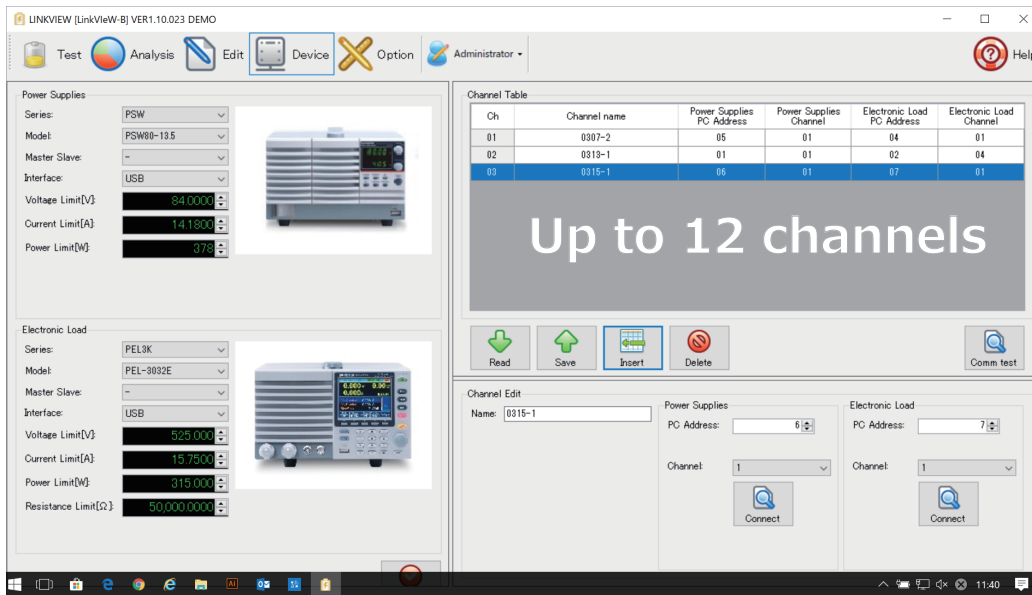
Support Models:

DC Power supply : PSU series / PSW series / PSB series / PFR series

DC Load : PEL-3000 series / PEL-3000E series / PEL-2000A series

● Edit : Charging / Discharging procedure editing

A) Support up to 100 patterns (sequence).

B) Sequence steps: 1000 steps

C) Minimum record period: 1s.

  Maximum step time: 100 Min.

D) Maximum repeat cycles: 65535 cycles.

You can set Examination pattern; Charge, discharge and Sleep.

(1) Sleep : End Condition (time [s])
   Error Detection Hi/Lo Voltage and current

(2) Charge : Setup the power supply
      Voltage, current, End Condition and Error Detection.

(3) Discharge : Setup the parameters of electronic load
    Mode ; CC, CR, CP, CR, etc.
    Range ;
    Parameter;
    End Conditions ; Discharge Time, Voltage and Current.※1
    Error Detection ;Error will be detected when the over/under
  setting voltage or current is detected

※1: Priority is given to the contents to which end conditions are met first.

Test : Start/Stop
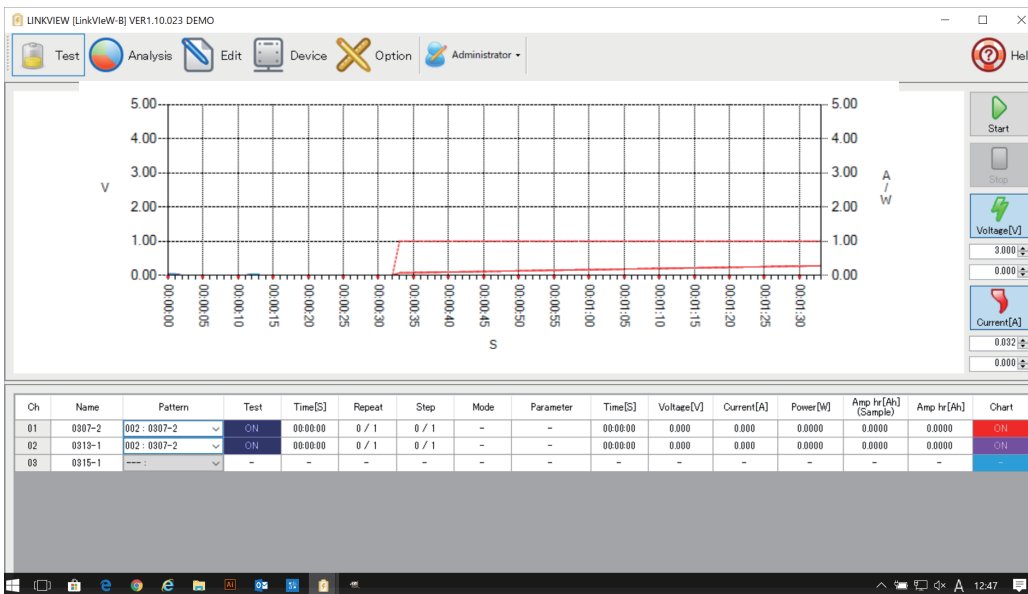
Click 'Start' button and examination will begin.
Graph will be displayed on the second.

When you suspend all the examinations on the way, click 'Stop' button. All the examinations will stop irrespective of the situation of each channel.

Name : Select Channel Name
Pattern : Select Patarn Name
Test : Select ON or OFF
Chart : Select ON or OFF at Dispaly.
Other condition are depend on pattern settings.

Analyzsis ※3

The data acquired by the examination can be checked on an analysis screen. Click 'Analysis' button and an analysis screen will be displayed.
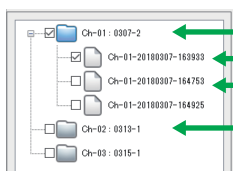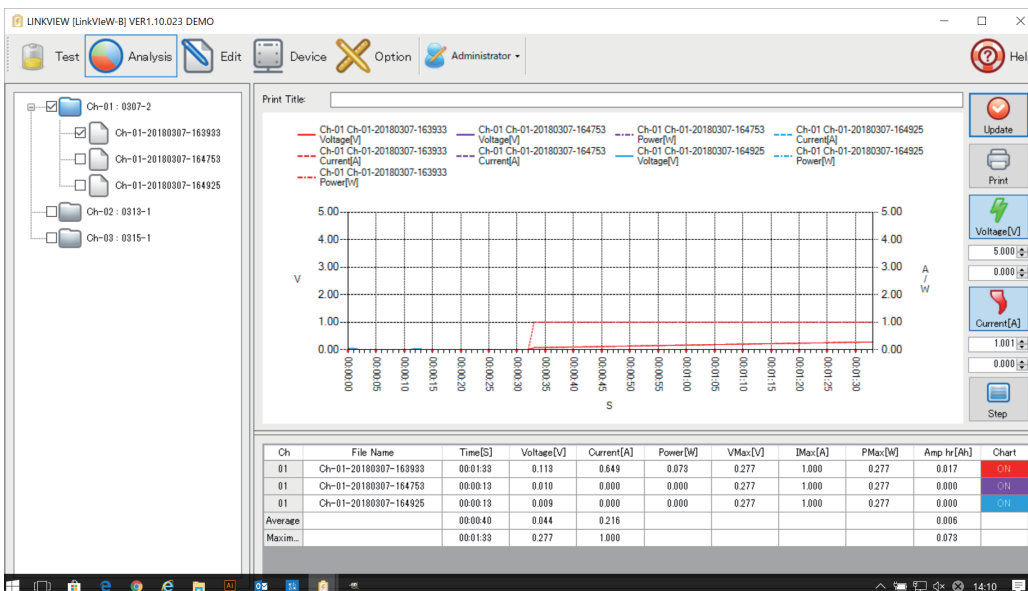
It is a folder of channel 1 (test1).
The first test data is contained.
The second test data is contained.

It is a folder of channel 2 (test2).

A data folder is created in a channel folder.
One data folder will be created for every examination.

Click 'Updating' button after choosing the data, a graph and data will be displayed. A graph is classified by color for every data.
* Since the graph of current is displayed in an absolute value, it becomes a plus direction irrespective of charge and discharge.

8 channel Charge / Discharge Test

USB, GP-IB
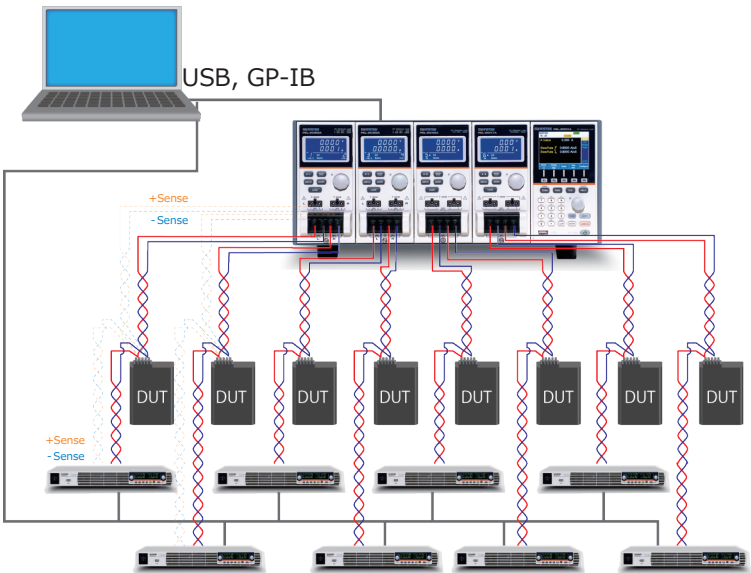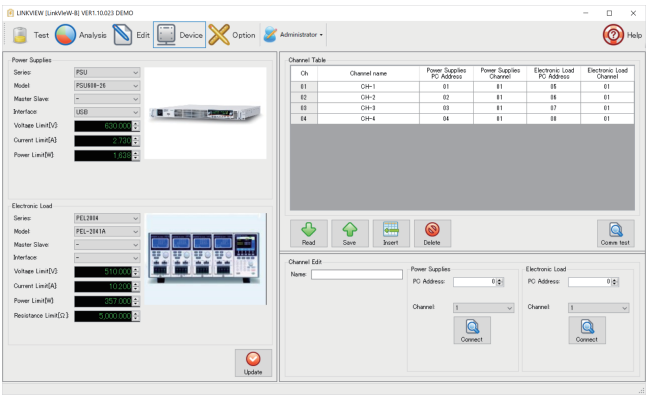
PEL-2000A series

D.C. Electronic Load Mainframe

PEL-2002A: 2 Slot   PEL-2004A : 4 slots

Interface : USB, RS-232, GPIB(Option)

D.C. Electronic Load Module

PEL-2020A   PEL-2030A   PEL-2040A   PEL-2041A

| 100W×2 ch | 2ch 30W, 250W | 1ch 350W | 1ch 350W |

Load Module	Description
PEL-2020A	200W, Dual Channel Module, (0~80V, 20A, 100W) x2
PEL-2030A	280W, Dual Channel odule, (1~80V, 5A, 30W) & (1~80V, 40A, 250W)
PEL-2040A	350W, Single Channel , (0~80V, 70A, 350W)
PEL-2041A	350W, Single Channel , (0~500V, 10A, 350W)

PSU series

PSU series provides maximum 2 units in series connection (models under 300V) to achieve maximum 600V or 4 units in parallel connection to obtain maximum800Aand the maximum output power of 6.24 kW.

Interface※: USB, LAN, RS-232, GPIB(Option)

maximum 4 units in parallel

※ Other interface does not use at LinkVIeW.

	PSU6-200	PSU12.5-120	PSU20-76	PSU40-38	PSU60-25
V	6	12.5	20	40	60
A	200	120	76	38	25

	PSU100-15	PSU150-10	PSU300-5	PSU400-3.8	PSU600-2.6
V	100	150	300	400	600
A	15	10	5	3.8	2.6

4 channel Large Battery Charge / Discharge Test

USB, GP-IB
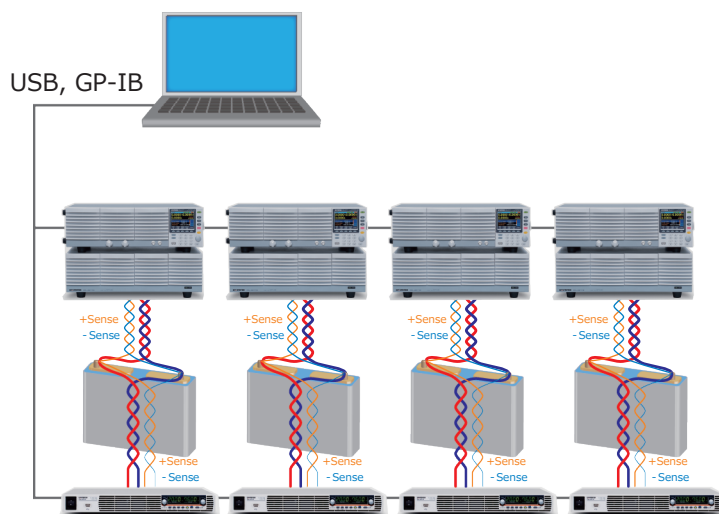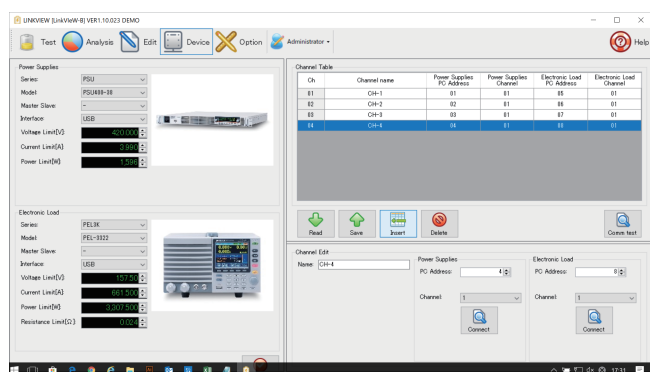
● PEL-3000 series

PEL-3021

PEL-3111

PEL-3322

PEL-3533

PEL-3744

PEL-3955

Model	PEL-3021	PEL-3041	PEL-3111	PEL-3211
Voltage	1.5V~150V	1.5V~150V	1.5V~150V	1.5V~150V
Current	35A	70A	210A	420A
Power	175W	350W	1050W	2100W

Model	PEL-3212	PEL-3323	PEL-3424	PEL-3535
Voltage	1.5V~150V	1.5V~150V	1.5V~150V	1.5V~150V
Current	0~420A	0~630A	0~840A	0~1050A
Power	2100W	3150W	4200W	5250W

Model	PEL-3322	PEL-3533	PEL-3744	PEL-3955
Voltage	1.5V~150V	1.5V~150V	1.5V~150V	1.5V~150V
Current	0~630A	0~1050A	0~1470A	0~1890A
Power	3150W	5250W	7350W	9450W

Interface※: USB, RS-232, GPIB(Option)

● PSU series

Interface※: USB, LAN, RS-232, GPIB(Option)

maximum 4 units in parallel

※ Other interface does not use at LinkVIeW.

PSU series provides maximum 2 units in series connection (models under 300V) to achieve maximum 600V or 4 units in parallel connection to obtain maximum 800A and the maximum output power of 6.24 kW.

	PSU6-200	PSU12.5-120	PSU20-76	PSU40-38	PSU60-25
V	6	12.5	20	40	60
A	200	120	76	38	25

	PSU100-15	PSU150-10	PSU300-5	PSU400-3.8	PSU600-2.6
V	100	150	300	400	600
A	15	10	5	3.8	2.6