



Battery Charge-Discharge System HJ Series



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Features

Battery Charge/Discharge System HJ Series offers various function-specific models applicable to various measurements for Battery basic research, Life test and Evaluation test.

HJ-SD8/SD8H Series can provide the half-cell measurement by 3-electrode-method using the reference electrode and can provide the each characteristics evaluation test on positive and negative material (on independent four terminals and realizing the high input impedance).

Minimum Discharge Voltage can be set till -2V and can conduct the complete discharge test.

The PC connected to HJ series, it can perform the multi-channel simultaneous test and various battery characteristics data analysis.



HJ-SD8

Independent 8-channel charge and discharge control.

Minimum data sampling time interval is 10 ms.

Equipped with transient recorder function that collects the transient data at 10 ms. (at a moment of switching to discharge mode from charge mode during long-hour measurement.)

Equipped with CC-CV operation which has digital control for minimum overshoot.

Auto-select for current range.

The digital filter reduces noise.

(It can function at the setting of more than 500ms data saving time interval.)

Equipped with Constant Power Control mode and Constant Resistance Control mode.

The system status, measurement progress and pre-set measurement conditions can see on one screen.

Capability to program maximum 20steps and 50patterns.

Equipped with jump function which repeats the continuous few patterns.

Equipped with High speed multi-step function:

1step-20stages(max) and 1stage can set at 10ms(minimum)

Capability to control the maximum 16 units (128 channels) by using the server PC and client PC.

Note: One PC System can control 6 units (48 channels) maximum.



SJ-SD8H

- Fast Data Sampling Function:

Data acquisition at the interval of $100\mu\text{s}$ for the rapid voltage change.

Data sampling time interval can be set from $100\mu\text{s}$ till 10 ms.

Maximum data acquisition point is 100,000 points. (at the time of fast data sampling mode)

- Ultra Fast Multi-stage method (Constant Current Control)

Minimum data retention time of one stage is from $100\mu\text{s}$ to 6s.

This function can program 50 stages on 1step.



Specifications

Type		HJ1001SD8/HJ1001SD8H	HJ1005SD8/HJ1005SD8H	HJ1010SD8/HJ1010SD8H
Channel	Number	8ch		
	Setting	Independent setting every each channel		
Control	Voltage	-2~10V		
	Current	0~ ±1A	0~ ±5A	0~ ±10A
	Step time	0.1 sec ~ 100 days (resolution 0.1sec)		
Range	Voltage	10V		
	Current	1A, 100mA, 10mA, 1mA, 100µA, Auto	5A, 500mA, 50mA, 5mA, 500µA, Auto	10A, 1A, 100mA, 10mA, 1mA, Auto
Control method		CC, CC/CV, CP, CR (at discharge mode)		
Communication		Connect to PC by Ethernet		
Control accuracy	Voltage	±0.05% of control ±1mV		
	Current	±0.05% of control ±0.05%F.S. (over 10% of F.S.)		
	Voltage	±0.05% of reading ±1mV		
	Current	±0.05% of reading ±0.05%F.S.		
Protective circuit		overvoltage / overcurrent / voltage line disconnection detection		
Power voltage		AC100~240V single phase (*1)		AC200~240Vsingle phase
Power consumption		350VA	1000VA	2500VA
Dimensions(W×H×D mm)		434×225×500	434×225×635	434×597(*2)×450
Weight		19kg	30kg	50kg

(*1) The attached power supply cable is AC100V use only.

(*2) It includes a caster. (It is 550mm only body)

Notice: It cannot let HJ-SD8H series mix with HJ-SD8 series in the same system.