

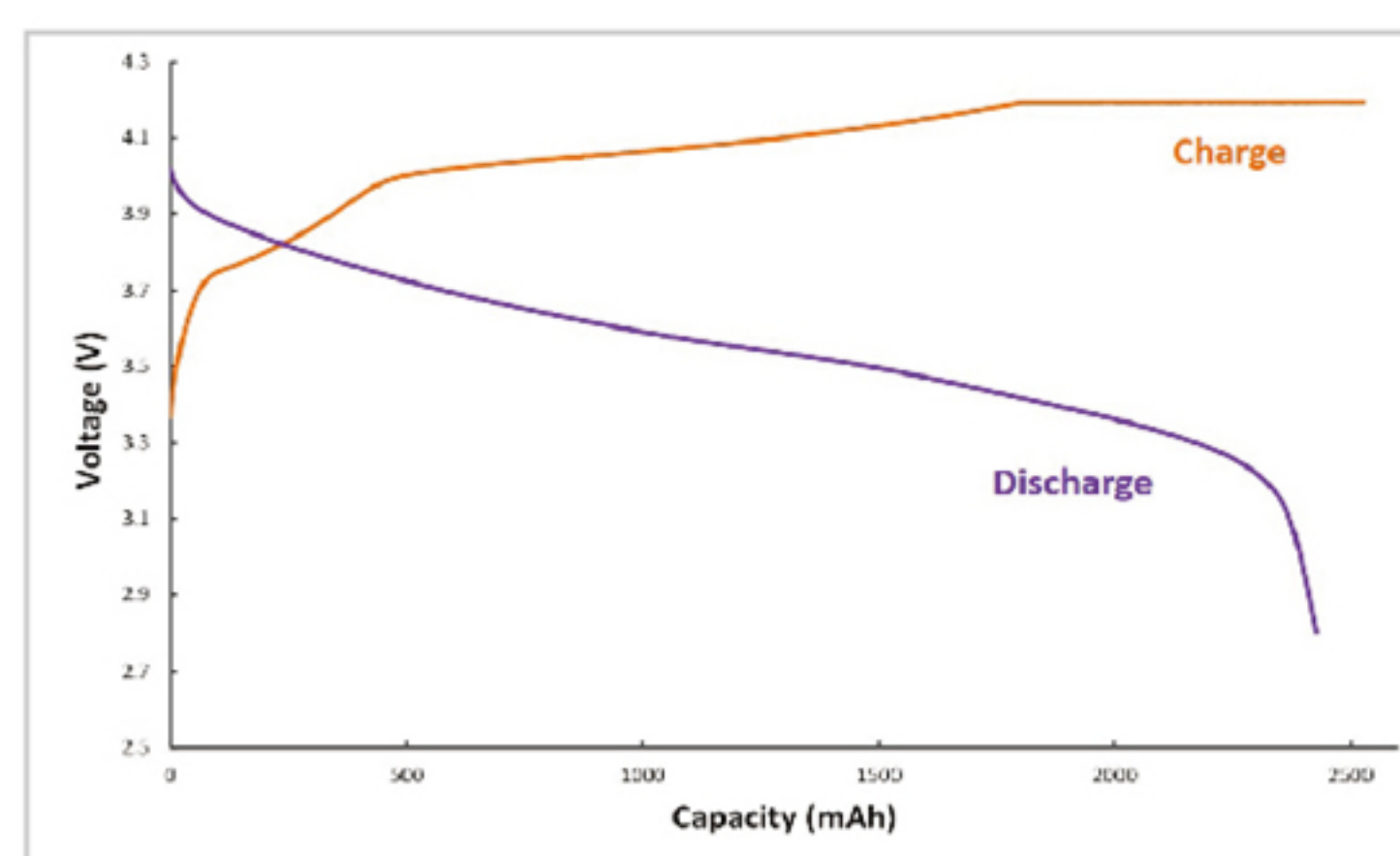
Q3400

Electrical, Optical & Thermal
Imaging & Test Systems

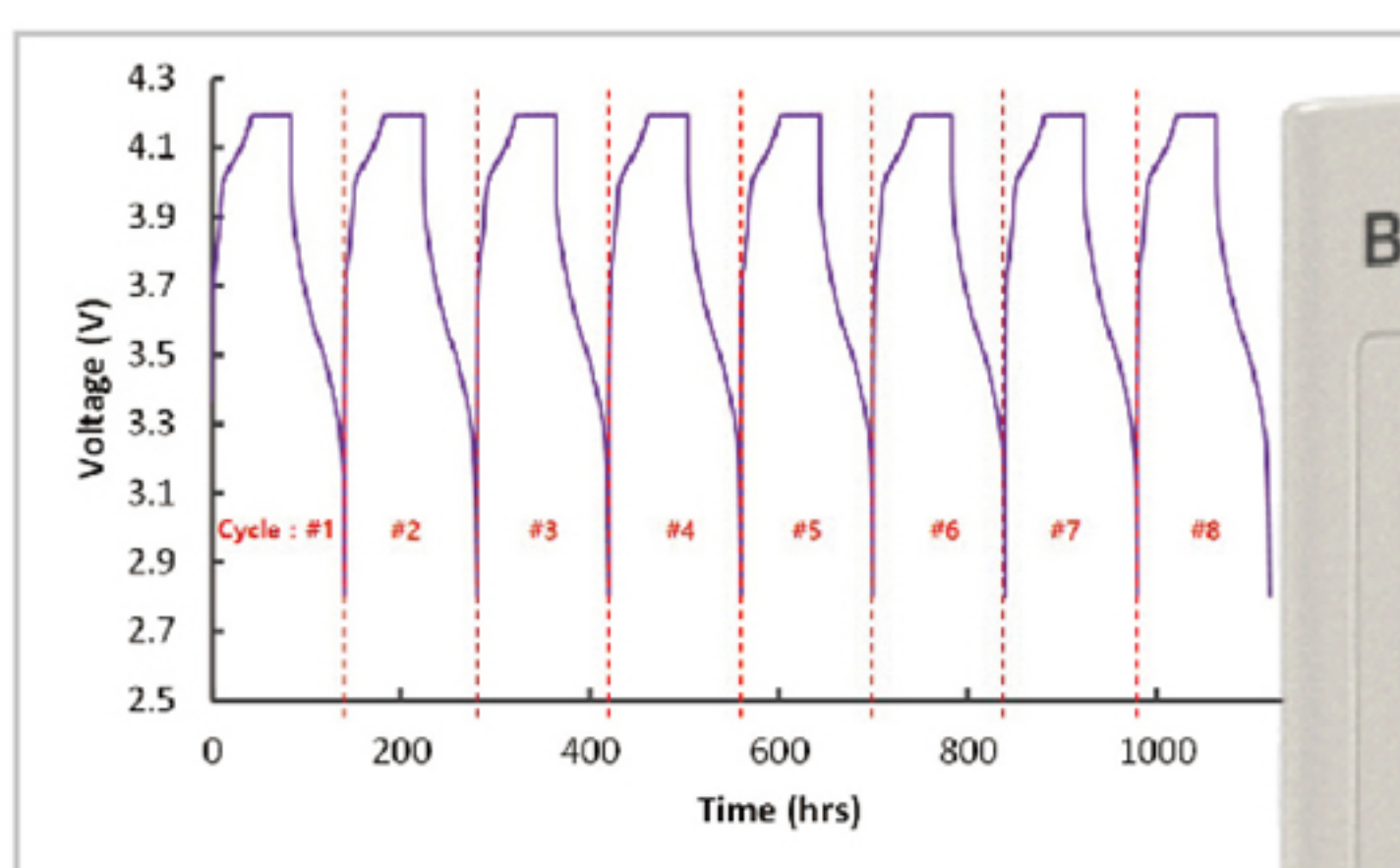
Battery Formation System

Battery Formation System Q3400 is a multi-channel simultaneous testing device for activating / stabilizing the battery by charging and discharging the battery which has no electrical properties after the assembly process in the secondary battery production process. It can be used as a lithium-ion battery and a harmful facility of various batteries. It is a test device suitable for mass production lines because it can drive several channels at the same time.

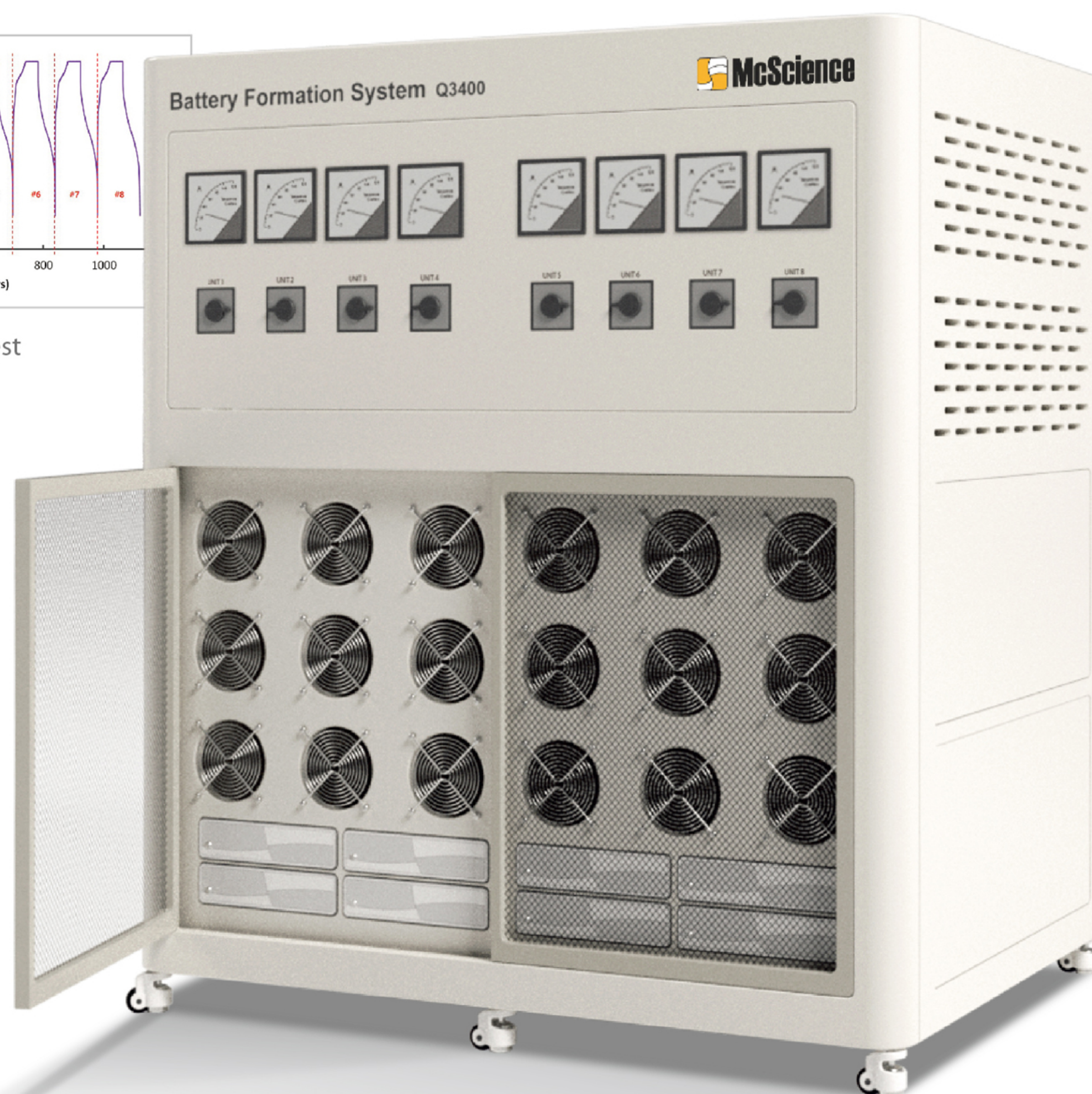
Formation + **Charge/Discharge** + **Cycle Test** + **OCV**



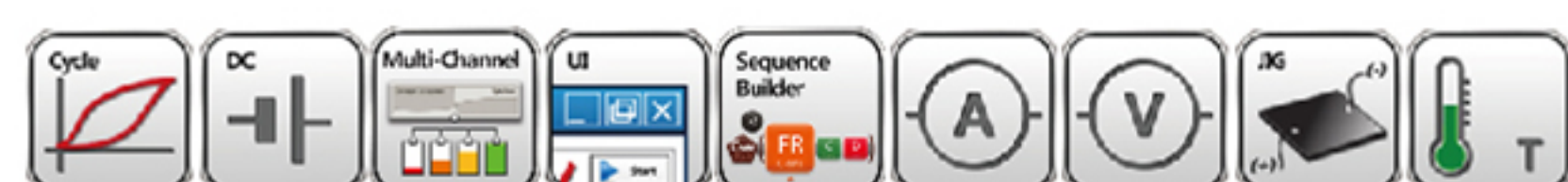
Charge-Discharge



Cycle Test



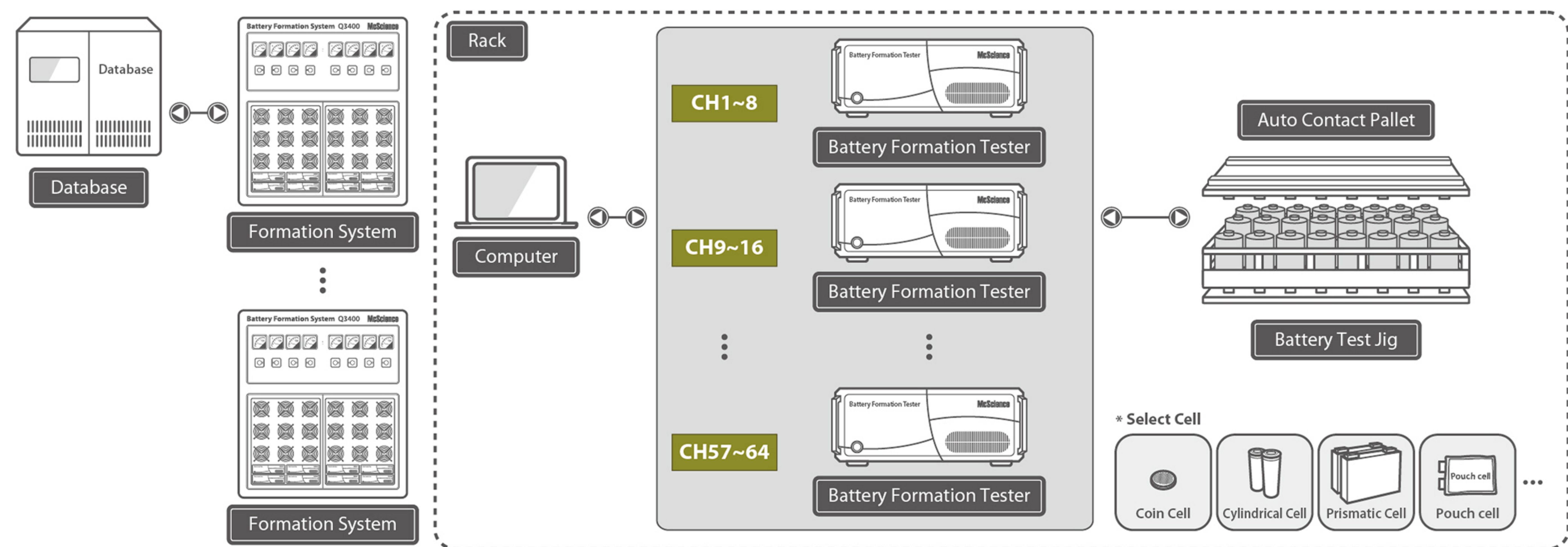
Battery Formation
Multi-channel Test
Charge/Discharge & Cycle Test
OCV Test
Regeneration
MES Support
Sequence Builder



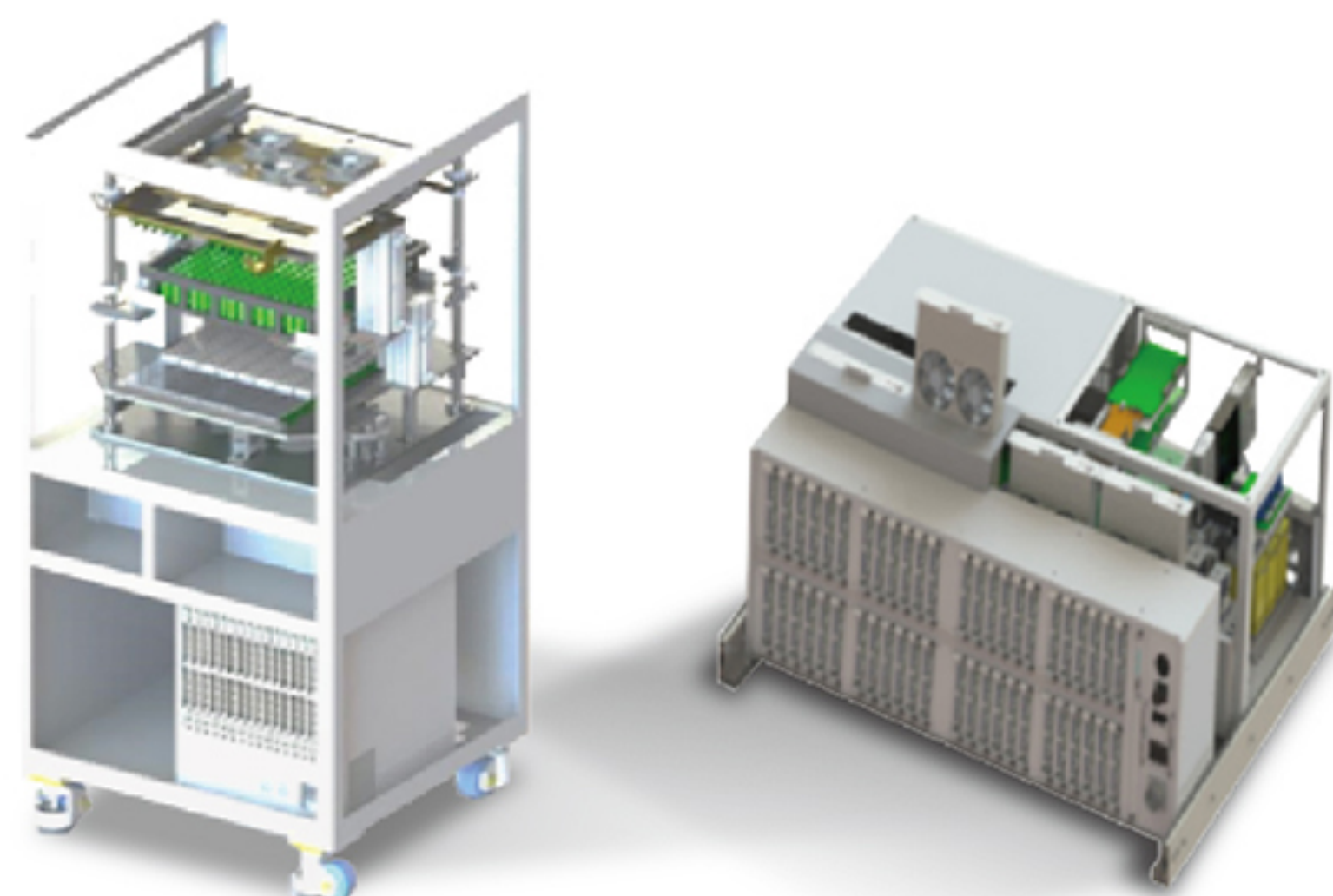
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System Configuration



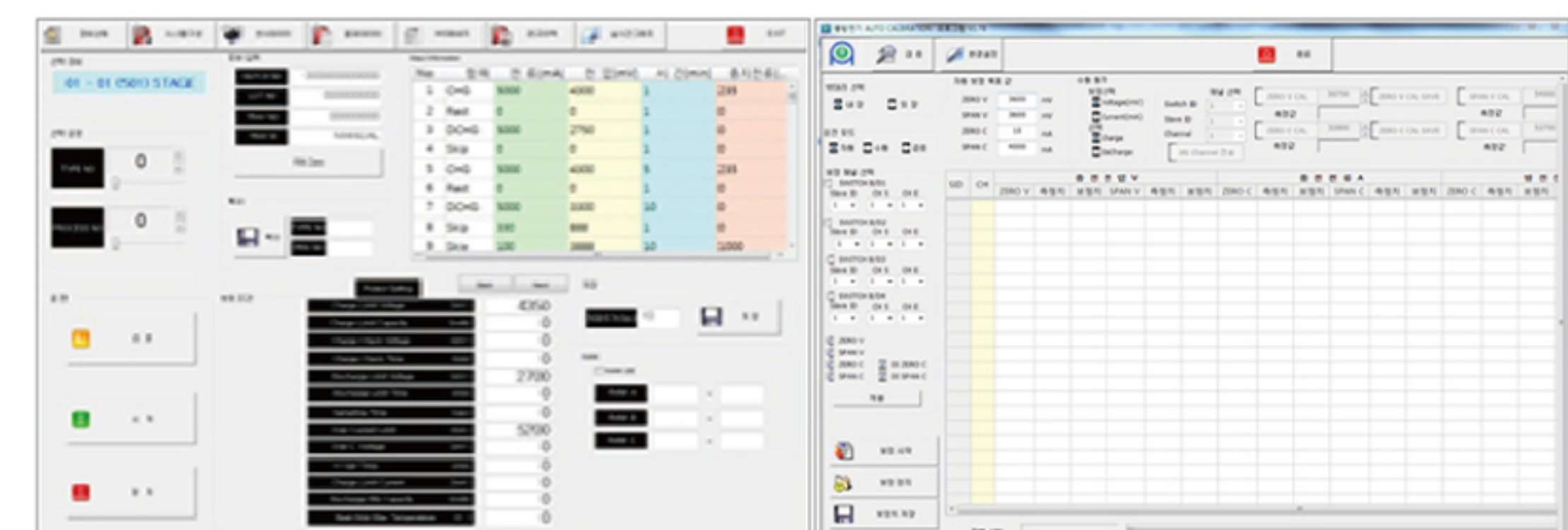
System Components



<System Frame>



<Formation Tester>



<Measurement S/W>

System Specification

Hardware

Channel		Max. 256ch
Operation Mode		CC, CV, CC/CV, OCV, REST
Voltage	Range	1 ~ 5V
	Resolution	16bit
	Accuracy	±0.1% of Full Scale or ±1mV
Current	Range	100mA ~ 100A (To Be Discussed)
	Resolution	16bit
	Accuracy	±0.1% of Full Scale
Control Interval		100ms ~ 500ms (To Be Discussed)
Communication		System : CAN, GUI : LAN

Software

Set Parameter	Operation Mode, End Condition, Safety Condition, Save Condition
Measure Parameter	Time, Voltage, Current, Capacity, Temperature
Control	(Group) Start, Stop, Channel Select (Channel) Start, Stop, Pause, Next
Monitoring	Status, Total Time, Voltage, Current, Temperature
Data File Format	Excel Compatible CSV Format or etc
Operation Mode	CC, CV, CC/CV, OCV, REST
End Condition	Time, Voltage, Current, Temperature, Capacity, Energy, Power, Delta T, Delta V
Safety Condition (Hardware Protection)	Max./Min. Voltage, Max./Min. Current, Max./Min. Capacity, Max./Min. Temperature
Save Condition	Delta Time, Delta Current, Delta Voltage, Delta Temperature