



BSI-LIBR - Li-Ion reconditioning turn-key system

Model

BSI-LIBR 24

Function

Testing, sorting, and balancing used Li-Ion battery cells for second life applications

Target

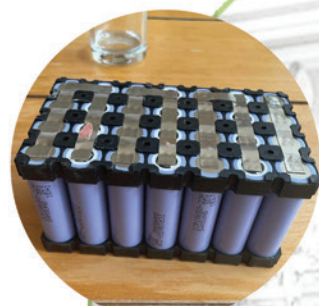
The **BSI-LIBR** battery reconditioner system is a must-have piece of equipment for any Electrical vehicles and scooters workshop, LIB Telcom maintenance centres, LIB Labs, or any other LIB business. Connect your hybrid E.V. battery pack and simply start the reconditioning plan - software included. The BSI-LIBR system is the best tool for building high-quality balanced battery packs

Method

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Parameters

	Minimum	Nominal	Maximum
1 Number of cells	2	16	24
2 Charge	0.1A	6A	50A
3 Discharge	0.1A	6A	50A
4 Active balancing (external unit)	0.1A	2A	4A
5 Battery handling capacity	10 Ah	50 Ah	500 Ah



Tech Specs:

- **Discharge**
 - Max Discharge Power 3,000W (60Vx50Amp)
 - Number of voltage sensors up to 24 (16 as standard)
- **Charge**
 - Max Charge Power up to 3KW
 - Max Charge Voltage 150V
 - Max Charge Current up to 50 A
- **Data Acquisition**
 - Processor Cortex-M4F (120Mhz)
 - Min Sampling Interval 200 Ms (40 modules)
 - DAC Resolution 13-bit

Testing Equipment

Load

- Max Load Voltage 8 V/channel (Customized up to 18V)
- Max Load Current 5A per channel
- Number of channels 24
- Applied Current Accuracy 0.5% of the Applied Current
- Applied Current Resolution .3 mA

Potential Measurement

- Measured DC Potential Ranges: 8 V/channel (Customized up to 20V)
- Resolution: .4mV
- Accuracy: 0.06 or 0.03% of FSR

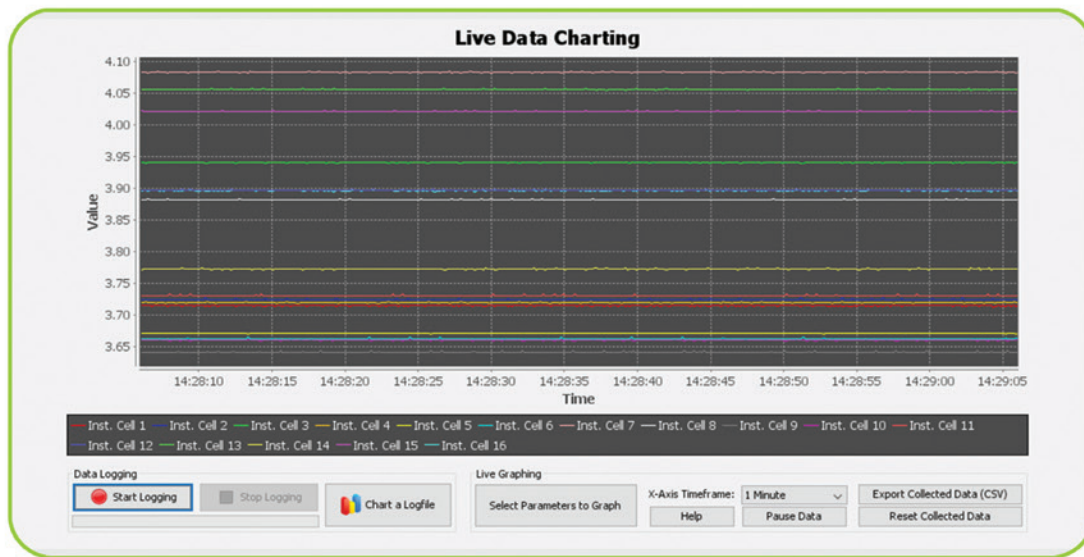
Current Interrupt Resistance

- Data Acquisition Speed: 10 KS/s

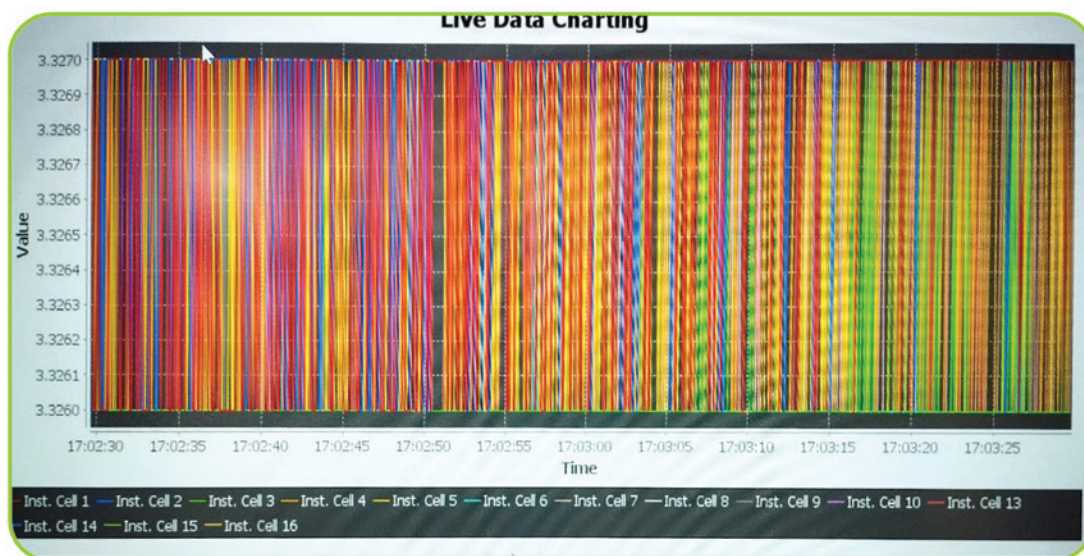


BSI-LIBR System screen Sample (Before/After)

Voltage difference between the cells before excitation: 440 millivolts.



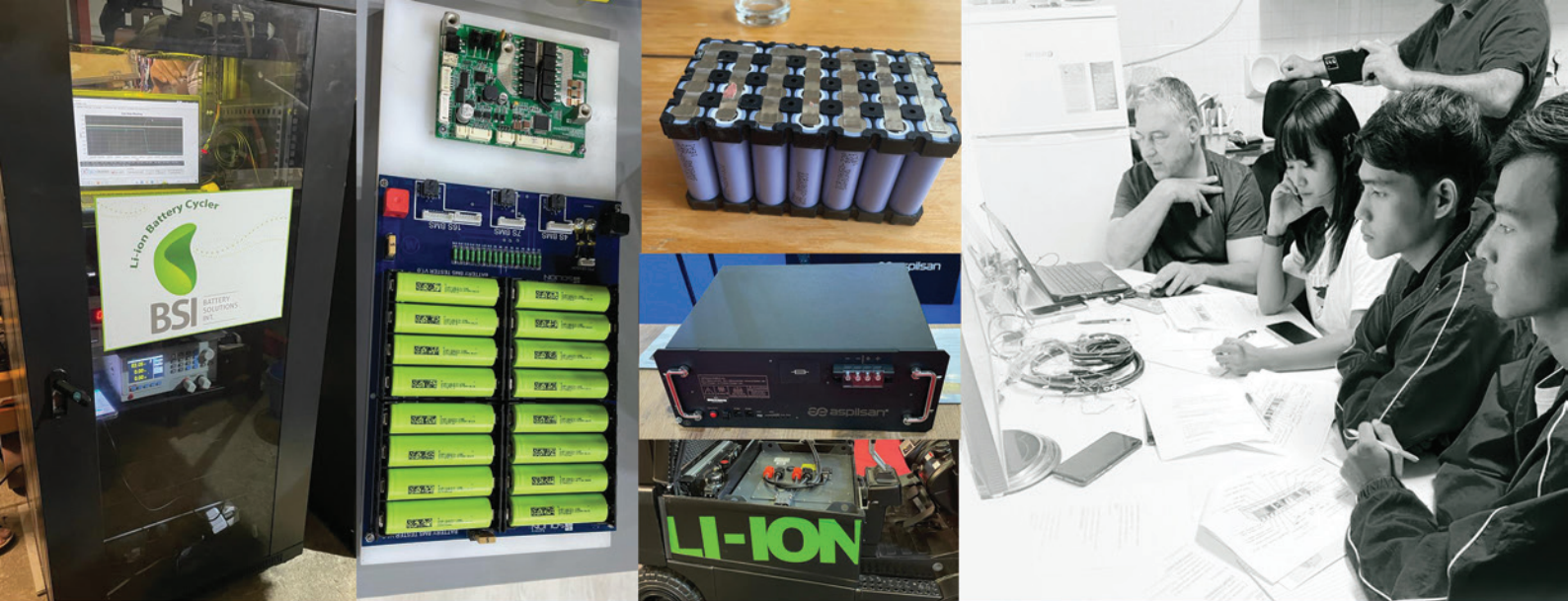
Voltage difference between the cells after excitation: 1 millivolt.



THE TURNKEY SYSTEM INCLUDES:

- Cabinet with internal charger + discharger + control panel.
- Laptop + software + operational manuals (in PDF)
- 12 volt backup battery + charger. (for Orion BMS)
- Orion high resolution BMS for battery monitoring & safety.
- 2 connecting harness for battery monitoring (4 mm pins)
- high current connector (standard Anderson)
- 10 external IMAX-B6 multi technology charger/discharger.
- 10 external 4A active BMS for quick battery balancing.
- Streamer + screen (or tablet) for active BMS monitoring.
- Quick guide for safe operation. Technical cores in BSI Labs.





Important remarks:

- The BSI-LIBR 24 is a state-of-the-art reconditioning system however its success rate of providing second life for batteries modules depends on quality of battery cells and careful and systematic balancing process according to the instruction and work schedule program.
- S.O.P. (Standards Operational Procedures) S.O.W. and Methods of operation will be provided during the advance study.

Warning

Utmost safety measures should be maintained through the whole process period to prevent fire and blow risks.

