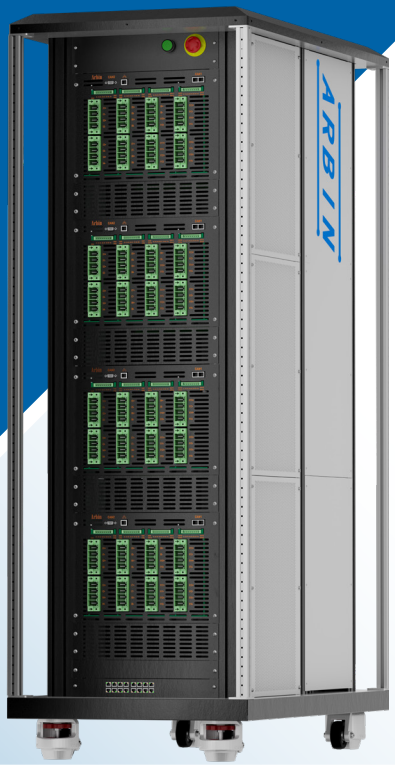
ARBIN
RBT-MODULE

Regenerative Battery Testing



High accuracy module testing solutions utilizing Arbin's regenerative technology for efficient and reliable testing.

Precision Meets Efficiency

As the demand for energy storage solutions grows, so does the need for regenerative technology that not only accurately tests and characterizes batteries, but also contributes to a sustainable future.

Arbin's Regenerative Battery Testing (RBT-Module) series combines high-precision measurements and regnerative technology to reduce the overall energy cost of your testbed. This innovative technology enables researchers to generate reliable and repeatable data without compromising on results in the pursuit of energy efficiency.

Key Features

- **100ppm Precision** with industry-leading 24-bit resolution across two current ranges per test channel
- **Channel Density:** 8 channels per module, capable of output currents ranging from ±50A up to ±400A/module, ±1200A/system
- **Minimize** floor space with up to 24 channels per chassis in a compact footprint
- **Parallelable** so any number of channels on the 8 channel module can be connected to increase the current handling capability
- **Reduce Energy Consumption:** Efficient regenerative circuitry can return up to 92% of discharge energy back to the system and/or grid

Standard Configurations	
Voltage Range	Current Range
8 to 60V	50A/10A
	100A/25A
8 to 100V	50A/10A
	100A/25A
8 to 200V	60A/10A
	100A/25A
Flexible Channel Ranges	
Parallelable up to ±1200A	
DIscharge to 0V available as an option	

System Characteristics	
Channels per Module	4 or 8
Channels per Chassis	Up to 24
Current Ranges per Channel	2 (auto switching)
Channel Parallel	Up to 1,200 A
Current Rise Time	<2 ms
Regenerative Efficiency	Up to 92%
Control & Measurement Specifications	
Accuracy	±0.02% FSR
Precision	±0.01% FSR
Measurement Resolution	24 Bit
Control Resolution	16 Bit
Time Resolution	100 µs
Data Acquisition Rate	Up to 1 kHz
Chassis Specifications	
Cooling	Air
Input Power	340V3P - 520V3P
Chassis Size	Width: 25” (635 mm) Depth: 45” (1,143 mm) Height: 72” (1,828.8 mm)

Application Focus

- Facility integration to interface with temperature chambers, test facilities, or other third party systems.
- Data Sampling and Logging: Powerful embedded controllers provide ultra-fast data sampling and logging.
- Comprehensive safety features for lithium-ion battery testing.
- Dynamic data acquisition based on changes in time, voltage, and current to capture more data when it’s needed and maintain efficient file sizes.
- Simulation of Real World Test Profiles.
- Module Research & Development.
- Module End-of-Line (EOL).

Powerful Software Integration

Arbin’s RBT-Module system, powered by our latest MITS Pro software, optimizes the battery testing process by simplifying control of the testing process, and integrating the test station into a test facility.

- Create and manage test schedules, monitor real-time testing, and analyze results.
- Integration with third-party hardware and automation software.
- Suitable for both laboratory and production environments.
- Local or remote control of test channels.
- Test data securely stored in a range of robust databased formats including MS SQL, Post GreSQL, Access, or utilize Apache Kafka for additional flexibility.

CONTACT US

1 (979) 690-2751 sales@arbin.com www.arbin.com