



The Leader in Automated Test, Data Acquisition and Control Systems



## Mixed Signal Battery Test System

### *Customized battery cycling and control*

The Mixed Signal Battery Test System is an automated test platform designed to meet today's advanced battery test requirements. The platform is ideal for testing a range of battery cells and packs, and can be used in applications such as research and design, quality control, and end of line manufacturing. Its distributed architecture provides a scalable solution with configurable system components to accommodate specific application needs.

### **BENEFITS**

- Distributed system architecture for easy system expansion
- Customizable software for user-defined monitoring, tests, alarms, and profiles
- Wide range of standard test, charge, and discharge functionality
- Reliable and easy to maintain

### **FEATURES**

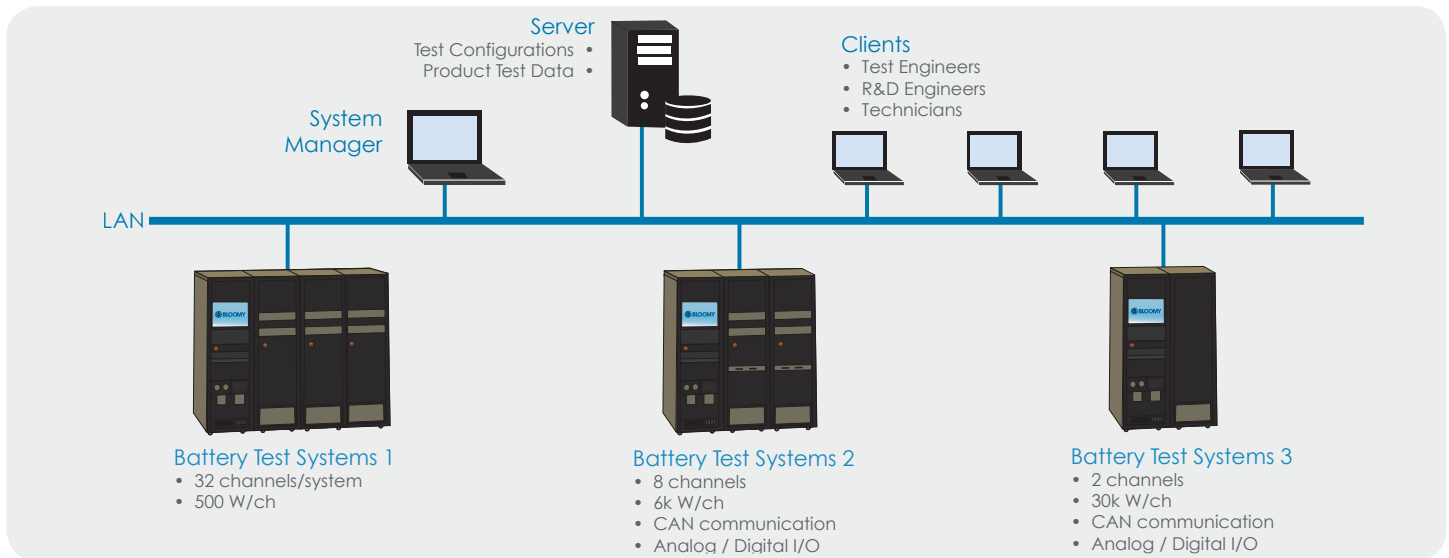
- Battery communication protocols including CAN, I2C, SMBus
- Custom hardware fixtures and cabling for battery interfacing
- Constant current, voltage, and power control
- Standard and custom charge and discharge profiles
- Load profile capture and playback
- Flexible hardware configurations: channel count, power, auxiliary I/O
- Industry-leading measurement and control hardware

Designing advanced batteries?

Inquire about Bloomy's Battery Management System testing platforms.

## DISTRIBUTED SYSTEM ARCHITECTURE

The distributed system architecture allows multiple battery test systems with different configurations to be easily added to the system manager.



## HARDWARE SPECIFICATIONS (PER-CHANNEL)

Systems are customized to accommodate specific requirements.

		RANGE	ACCURACY	RESOLUTION
<b>Power</b>		150W to 60kW		
<b>High Current Models</b>				
Charge	Voltage	Up to 150V	0.1% FS	0.03%
	Current	Up to 3000A	0.3% FS	0.03%
Discharge	Voltage	1.0 to 120V	0.05% Set + 0.05% Range	0.025%
	Current	Up to 7200A	0.12% Set + 0.08% Range	0.025%
<b>High Voltage Models</b>				
Charge	Voltage	Up to 800V	0.1% FS	0.03%
	Current	Up to 300A	0.2% FS	0.03%
Discharge	Voltage	7.0 to 600V	0.05% Set + 0.05% Range	0.025%
	Current	Up to 1800A	0.12% Set + 0.08% Range	0.025%
<b>Measurements</b>				
	Voltage	Full range	0.03%	16 to 24 bit
	Current	Full range	0.1%	16 to 24 bit
	Sampling Rate	Up to 20kS/s/ch for transient capture		
<b>Options</b>				
Communications	CAN, SMBus, Serial, Modbus, I <sup>2</sup> C, custom protocols			
Analog I/O	Channel and range configurable			
Digital I/O	TTL, 24V logic			
High isolation cell monitoring	Channel and range configurable			
Temperature monitoring	Channel and range configurable			
Strain gauge monitoring	Channel and range configurable			
Pressure monitoring	Channel and range configurable			
Internal resistance (AC, DC)	Channel and range configurable			
Additional charge & discharge profiles	<ul style="list-style-type: none"> <li>Constant resistance (Amps/Volts) discharge</li> <li>Taper or Pulse charge</li> <li>Customized profiles</li> </ul>			
Customer defined monitoring	<ul style="list-style-type: none"> <li>Pass/Fail Alarms</li> <li>OCV, CCV</li> <li>SOC, SOH</li> </ul>			

Call 860-298-9925 or visit  
[www.bloomy.com](http://www.bloomy.com)