

#### 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 userdefined monitoring, tests, alarms, and profiles
- Wide range of standard test, charge, and discharge functionality
- Reliable and easy to maintain

#### **FEATURES**

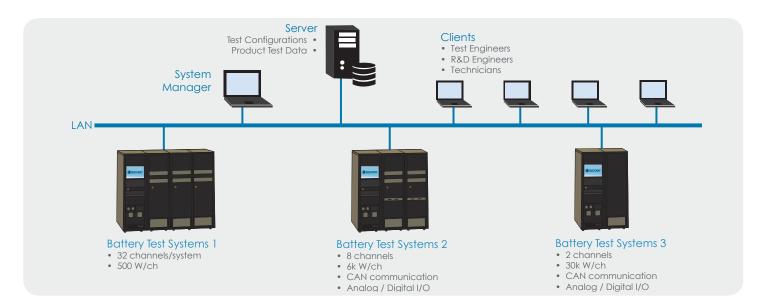
- Battery communication protocols including CAN, I2C, SMBus
- Custom hardware fixtures and cabling for battery interfacing
- Constant current, voltage, and power control
- Standard and custom charge and discharge profiles
- Load profile capture and playback
- Flexible hardware configurations: channel 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
Power		150W to 60kW		
High Current Models				
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%
High Voltage Models				
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%
Measurements				
	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 tra	ansient capture	
Options				
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		

Call 860-298-9925 or visit www.bloomy.com