

Automated test solutions for the entire product lifecycle



# 24 channels of fault insertion and switching for the Battery Simulator 1200

The Battery Fault Insertion Unit (FIU) provides intelligent switching of cell-simulation channels for the Battery Simulator 1200. The switching capability enables simulation of open-circuit and short-to-rail fault conditions on any cell channel for the purposes of battery management system (BMS) testing. Additionally, a fourwire auxiliary input allows you to connect an external digital multimeter (DMM) instrument to any cell channel for very high-accuracy bypass current and cell voltage measurements. Each FIU provides 24 independentlyprogrammable cell-switching channels for one or two 12-cell Battery Simulator 1200 units. Additional Battery Simulator 1200 and FIU instruments can extend functionality up to 120 series-connected cell channels.

## **APPLICATIONS**

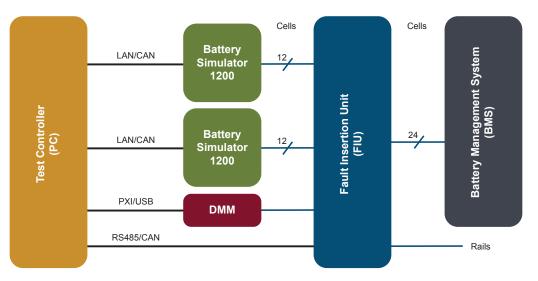
- Connect external DMM for very highaccuracy cell measurements
- Enhance Battery Simulator 1200 for automated BMS testing with fault insertion
- Perform open-circuit and short-circuit fault simulation
- Hardware-in-the-loop (HIL), validation, and end-of-line BMS testing

#### **FEATURES**

- RS485 and high-speed CAN control communication
- 600V channel-to-channel and channel-toground isolation
- NI LabVIEW<sup>™</sup> drivers
- Stackable up to 120 channels

**Testing a BMS?** Inquire about Bloomy's turnkey BMS test solutions.

#### **APPLICATION DIAGRAM**



### HARDWARE SPECIFICATIONS

ELECTRICAL	
Input power	24 VDC, 2A
FAULT INSERTION AND SWITCHING	
Number of channels	24
Current per channel	500 mA
Relay type	Reed / Non-latching
Voltage isolation	600 VDC
Maximum switching power per channel	100W

CONTROL	
Communication	RS485 and CAN
Drivers	NI LabVIEW™
PHYSICAL	
Dimensions	19"W x 1.75"H x 4.5"D (1U) (482.6 mm W x 44.5 mm H x 114.3 mm D)
Weight	4 lbs (1.8 kg)
Operating temperature	0 – 35°C

## **FUNCTIONAL DIAGRAM**

