

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

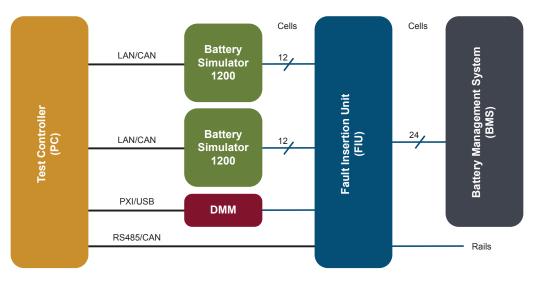
- Connect external DMM for very highaccuracy cell measurements
- Enhance Battery Simulator 1200 for automated BMS testing with fault insertion
- Perform open-circuit and short-circuit fault simulation
- Hardware-in-the-loop (HIL), validation, and end-of-line BMS testing

FEATURES

- RS485 and high-speed CAN control communication
- 600V channel-to-channel and channel-toground isolation
- NI LabVIEW™ 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

