

# 250kW Battery Pack Level Test System

- Bi-directional Power cyclers, which acts as source and sink during charge/discharge of batteries
- Integration and Emulation of Battery Management System (BMS) through Controller Area Network (CAN) bus interface
- Performance and Characterization Test as per AIS 048, ECE R100, USABC, Freedom Car, Battery Test Manual, UN38.3, ISO 12405, IEC and in particular,
  - Measurement of Static capacity
  - Constant power discharge
  - Hybrid pulse power (low and high current levels) Characterization
  - Self-discharge
  - Cold cranking testing of batteries
  - Charge sustaining energy efficiency
  - Charge depleting energy efficiency
  - Perform charge/ discharge cycling of batteries to obtain charge and discharge capacity, energy and DC internal resistance
  - Reserve Capacity Testing
  - Start/Stop testing
  - Cycle Life Test
  - Map-based cycle life at various DOD (depth of discharge) and current (Ampere) test conditions
  - Battery Cycle life testing and Calendar Life Test.
  - Reference performance testing
  - Rapid Charge/Discharge
  - Electrical Abuse Test
    - Overcharge/Over voltage
    - Over-discharge



## Specifications:

- Voltage: 36V - 800V DC
- Current: 600 Amp
- Voltage / Current accuracy: 0.5% FS
- Nominal Capacity: 250kW
- Battery test system with Cycler.
- Battery Coolant conditioning