

# **Electric Drive and Advanced Battery and Components Testbed (EDAB)**

March 5, 2012 through December 31, 2013

### **Description / Specification**

Vehicle

Configuration Series PHEV

Traction Motor UQM 145 kW / single-speed gearbox

APU UQM 145 kW / 5.3L gasoline engine



Manufacturer EnerDel

Model Type I EV Pack (A306)

Chemistry Li-ion

Cathode Mixed Oxide (Modified NMC)

Anode Amorphous Hard Carbon

Configuration 4 parallel strings of 96 cells

Rated Capacity (Ah) 70 Nominal Voltage (V) 345 Pack mass (kg) 285

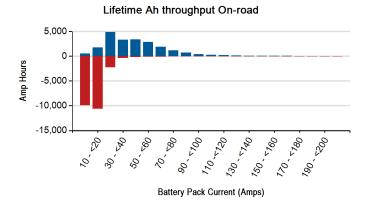
Cooling Type Passive (sealed enclosure)

## **ESS Reference Performance Testing Results**

Initial Measured Capacity (BOL) (Ah)	63.2
Present Measured Capacity (Ah)	52.1

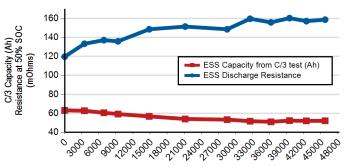
### **ESS On-road Testing Results**

Miles driven	27,880.1
City % of miles	54%
Hwy % of miles	46%
Amp Hours throughput lifetime	45,767.3
Avg. energy consumption (DC Wh/mi)	232.3



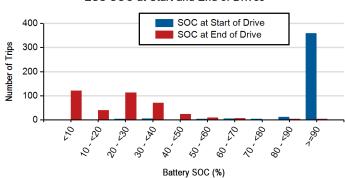


ESS Capacity and Resistance from RPT



Amp Hour Throughput On-Road (Ah)

#### ESS SOC at Start and End of Drives



#### Lifetime Ah throughput On-road

