

Electric Drive and Advanced Battery and Components Testbed (EDAB)

March 5 2012 through April 29 2013

Description / Specification

Vehicle

Configuration Series PHEV

Traction Motor UQM 145 kW / single-speed gearbox APU

UQM 145 kW / 5.3L gasoline engine

Battery Pack

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) 345 285 Pack mass (kg)

Cooling Type Passive (sealed enclosure)

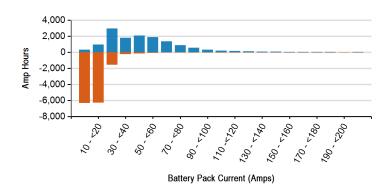
ESS Reference Performance Testing Results

Initial Measured Capacity (BOL) (Ah)	63.2
Present Measured Capacity (Ah)	53.4

ESS On-road Testing Results

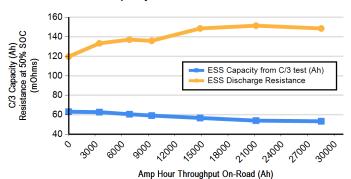
Miles driven	16,440.1
City % of miles	53%
Hwy % of miles	47%
Amp Hours throughput lifetime	28,623.1
Avg. energy consumption (DC Wh/mi)	242.2

Lifetime Ah throughput On-road

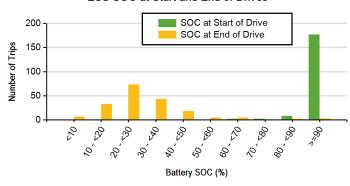




ESS Capacity and Resistance from RPT



ESS SOC at Start and End of Drives



Lifetime Ah throughput On-road

