Electric Drive and Advanced Battery and Components Testbed (EDAB)

March 5, 2012 through September 9, 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 IEV 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)

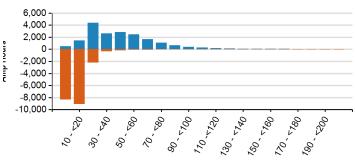
ESS Reference Performance Testing Results

Initial Measured Capacity (BOL) (Ah)	63.2
Present Measured Capacity (Ah)	52.3

ESS On-road Testing Results

Miles driven	23,451.2
City % of miles	55%
Hwy % of miles	45%
Amp Hours throughput lifetime	39,508.5
Avg. energy consumption (DC Wh/mi)	233.9

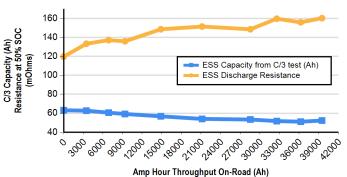
Lifetime Ah throughput On-road



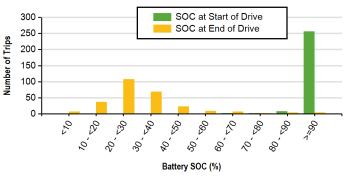
Battery Pack Current (Amps)







ESS SOC at Start and End of Drives



Lifetime Ah throughput On-road

