

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

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Configuration 4 parallel strings of 96 cells

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

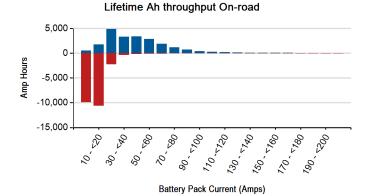
Cooling Type Passive (sealed enclosure)

ESS Reference Performance Testing Results

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

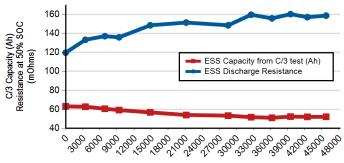
ESS On-road Testing Results

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



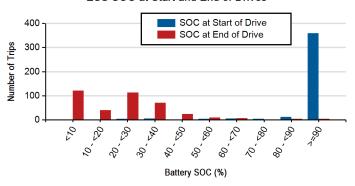


ESS Capacity and Resistance from RPT

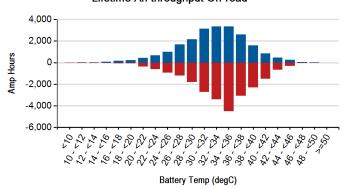


Amp Hour Throughput On-Road (Ah)

ESS SOC at Start and End of Drives



Lifetime Ah throughput On-road



INL/MIS-12-25146