

# Info Sheet 2024

The Switch Lab EV Models		
Features	PM/96v	DC/72v
Open Chassis	✓	✓
Rebuildable	✓	✓
Street Legal <i>(Most States)</i>	✓	✓
Instructor Training	✓	✓
Online Forum Access	✓	✓
Curriculum	✓	✓
Multi-disciplinary	✓	✓
Pre-Assembled Wiring Harnesses	✓	✓
12v System	✓	✓
Hydraulic Brake System	✓	✓
Battery Monitor Display	✓	✓
Indicator Lights	✓	✓
72v Lead Acid Battery Pack		✓
7" Series DC Motor		✓
9" Permanent Magnet AC Motor	✓	
Programmable Motor Controller	✓	✓
Battery Management System	✓	
96v LFP Battery Pack	✓	

The Switch Lab EV Models		
Specs	PM/96v	DC/72v
Horsepower	108hp	40hp
Torque	173 ft-lbs at 0 RPM	65 ft-lbs at 0 RPM
Battery	108 volt 7.4 kw/hr LFP	72 volt PB 450 AMPS
Range	50 miles	15 miles
Top Speed	85 mph	40 mph
0-40 MPH	4 seconds	8 seconds
Throttle	Hall Effect Sensor	Resistive

Vehicle Dimensions	
Ground Clearance	5 Inches
Curb Weight	1,350lbs (615kg)
Maximum Weight	2,050lbs (930kg)
Switch Height	54 inches
Switch Overall Length	144 Inches
Switch Track Width	78 Inches
Switch Overall Width	79 Inches

# Frequently Asked Questions

## Seat Configurations

- ✓ 2 seats in front (*standard*)
- ✓ 3 seats - 1 seat in front center drive and two seats in rear (*optional*)

## Vehicle Charging

- ✓ All vehicles can be plugged into 110 outlets, and Lithium Vehicles can also be plugged into J1772 outlets (standard EV plug)
- ✓ Lead acid can use an extension cord for 110v input.
- ✓ All vehicles can support 110-240 volt input. The Lead acid vehicle requires the proper connector.

## Vehicle Charging Time

- ✓ 110 volts charge at the rate of 10-12 miles per hour of charge
- ✓ 240 volts depend on amperage of circuit
  - 25 amp circuit charges at about 25 miles per hour of charge
  - 50 amp circuit charges at about 35 miles per hour of charge

## Delivery

- ✓ Shipped partially assembled - glider format
  - Rolls on/off trailers
- ✓ All packing lists & parts are secured inside the glider frame
- ✓ Includes instructions for unpacking & organizing

## Software

- ✓ Orion BMS 2.0 Utility Program (*PM/96v ONLY*)
  - Windows & Linux compatible
  - CAN Adapter required
  - Link for information & download: <https://www.orionbms.com/products/orion-bms-standard#downloads>
- ✓ Hyper9 Motor controller OEM software (*PM/96v & PM/72v ONLY*)
  - Link for information & download: <https://go-ev.com/downloads/>
  - Serial to USB Driver adapter required

## **Mobile Apps (*BMS Tablet Upgrade ONLY*)**

- ✓ BMS Android Tablet Interface (Torque Pro - OBD2)
  - Google/Android compatible
  - OBD2 bluetooth adapter required
  - Link to app purchase and download: <https://play.google.com/store/apps/details?id=org.prowl.torque>

## **Software Privacy Policies**

Orion BMS 2.0: <https://connect.orionbms.com/resources/pdf/terms.pdf>

Hyper9 Motor OEM: <https://www.danatm4.com/privacy-notice/>

Torque Pro - OBD2 App: <https://torque-bhp.com/privacy.txt>

[www.TheSwitchLab.com](http://www.TheSwitchLab.com)