

Market: Motive
Solution: Personal Motive Electric Vehicle battery
Product: Custom Module Design



Features & Benefits:

Module:

- High cycle life (4500 cycles to 80% DOD as a module) for low total cost of ownership
- Twice the runtime as the previous NiMH battery
- Reliable Electronics and Firmware
- Extremely safe Lithium Ion chemistry
- Robust mechanical design
- Flame retardant plastics to UL-94V0

Battery Pack:

- Paralleled for safety redundancy
- Internal Battery Management System (BMS) communicates with vehicle
- Automatic protection and balancing by BMS

Module Technical Specifications:

Nominal Voltage: 73.6 V

Nominal Capacity (C/5, 23°C): 5.6 Ah, 412 Wh

Weight (approx.) for 2 module system: 10.3 kg / 22.7 lbs total

Dimension incl. Terminals WxLxH: 191.15 mm x 358.89 mm x 66.6 mm

An innovative and leading manufacturer of electric personal vehicles contacted Valence to develop a robust power source for their vehicle. Their requirements for the battery included:

- The technology must be a safe Phosphate-type
- High cycle life and light battery
- Must be able to handle high vibration
- Must handle violent jolts and jumps
- Custom battery system with BMS built-in
- Module design must be strong
- Fast and safe recharging

The Valence design far exceeded the prismatic cell options the company had previously evaluated. Each vehicle utilizes 2 custom modules, and is now delivering a reliable power source for up to 24 miles on a single charge.

