

## AeroVironment, Inc. Efficient Energy Systems Overview

### Background

AeroVironment provides customers with more actionable intelligence so they can proceed with certainty. Based in California, AeroVironment is a global leader in unmanned aircraft systems, tactical missile systems and electric vehicle charging and test systems, and serves militaries, government agencies, businesses and consumers. For more information visit [avinc.com](http://avinc.com).

While legislators, lobbyists, environmentalists and think tank analysts have debated for decades how best to solve America's energy and environmental issues, a Southern California-based technology company has quietly been helping to spark an efficient energy revolution. AeroVironment, Inc. (NASDAQ: AVAV) is a leader and innovator in electric vehicle charging systems and EV testing and simulation systems that help give passenger EV drivers, industrial EV fleet managers and next generation EV developers the certainty they need to succeed.

The company earned its "pioneer" status as lead-developer of the record-setting, solar-powered GM Sunraycer, and then the GM Impact, the world's first modern all-electric car. In addition, the company introduced one of the first fast-charge systems for early consumer electric vehicles. Today, AeroVironment provides practical and affordable solutions supporting electric transportation.

### EV Solutions for the Everyday Driver

AeroVironment developed its passenger EV charging solutions to help electric vehicle drivers embrace clean transportation. Safe and efficient charging systems located at the home, the workplace and even in the trunk help alleviate concerns of being stranded without energy. With

easy to use and reliable home and workplace charging infrastructure, the electric vehicle becomes a practical alternative to the gas-powered vehicle.

AeroVironment's breadth of EV Solutions – including home, office, and commercial charging stations – enhances the utility of EVs by putting to rest “range anxiety” concerns and perceptions. The company created and operates the landmark West Coast Electric Highway, a system of more than 50 stations including both DC quick and 240V AC chargers distributed along Interstate 5 through Oregon and Washington State.

Just as internal combustion engine vehicles need fuel, EVs need electricity – and charging infrastructure is critical to the practical, widespread roll out of electric vehicles.

Eight global automakers selected AeroVironment as the preferred home or in-trunk charging solution provider for their customers. The company also works with battery manufacturers, utilities, businesses and government agencies to implement practical and modern charging infrastructure, and to deploy a wide array of ancillary EV-related solutions such as usage analysis tools, network subscription software and advanced battery test services. All of these elements will be integral to the development, broad adoption and practical use of electric vehicles.

Learn more at [evsolutions.com](http://evsolutions.com)

### **PosiCharge® for Industrial Applications**

AeroVironment's PosiCharge smart charging systems support thousands of electric utility vehicles keeping today's high-velocity supply chain moving at Fortune and Global 500 factories, distribution centers and airports throughout North America.

PosiCharge systems allow airport ground support equipment (GSE) and heavy-duty material handling equipment (MHE) fleet managers to operate electric vehicles efficiently while increasing the longevity of their battery assets and eliminating costly, hazardous battery rooms. PosiCharge systems help fleet managers minimize downtime, enhance productivity, optimize battery and vehicle

assets, and improve workplace safety. With proprietary technology that safeguards batteries by customizing each charge, PosiCharge systems can actually extend a battery's useful life compared to conventional charging solutions, further optimizing operations.

The broad line of industrial electric fleet systems includes the new ProCore™ high frequency charging system, Battery Rx™ health monitor, and PosiNET™ Web-based asset management software. By optimizing charging systems, battery management, and fleet/asset management, PosiCharge systems significantly reduce the amount of time required to charge electric vehicle battery packs while maximizing range, performance and lifespan.

**Learn more at [posicharge.com](http://posicharge.com)**

### **EV Test Systems**

AeroVironment's power cycling and test systems consist of an industry-leading family of grid-tied, DC power processing hardware and software solutions that are used to test and vet advanced power and alternative energy storage systems, including advanced hybrid and electric vehicle drive trains and batteries. Having earned a reputation for reliability and ease of use, these systems have become the standard for leading EV and battery research labs in the United States by helping customers shorten time to market, increase product reliability, and reduce development costs. Customers include the world's leading automotive, battery, defense, and fuel cell companies, universities, utilities, government agencies and advanced engineering laboratories.

**Learn more at [avtestsystems.com](http://avtestsystems.com)**