
Schneider Electric

Global Specialist in Energy Management Keeps Electric Vehicles Running With AirVantage Smart Automation



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Based in France, Schneider Electric is a global specialist in energy management with operations in more than 100 countries. Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in energy and infrastructure, industrial processes, building automation and data centers/networks, as well as a broad presence in residential applications.



Business Challenge

The SAVE (Seine Aval Véhicules Electriques) project is a joint initiative by Renault, Schneider Electric, EDF, the Yvelines General Council, EPAMSA (contracting authority for Seine Aval) and the Île-de-France region to complete comprehensive tests on electric vehicles and prepare for the introduction of electric vehicles to the mass market in France. As part of the project, pilot customers will have access to a charging infrastructure at home and at work, in parking lots and on public highways.

Schneider Electric develops charging terminals for newly built Electric Vehicle Charging Stations (EVCS) throughout the test territory. In order to meet the tight timeline required for the project, as well as include the remote monitoring and control necessary to manage charging terminals dispersed through 51 towns and five counties, Schneider Electric turned to Sierra Wireless to assist in quick development of a service and maintenance connected electric charging terminal.

Sierra Wireless AirVantage™ Platform solution

Schneider Electric's electric vehicle charging terminal is a comprehensive hardware and software solution connected by AirVantage Smart Automation, a machine-to-machine (M2M) Platform as a Service (PaaS) offering that accelerates development and significantly reduces

costs associated with deploying and operating M2M industrial control applications. Smart Automation helps machine OEMs and industrial control systems integrators to quickly connect programmable logic controllers (PLC) and sensors to easily develop M2M applications, enabling OEMs to add service revenue to their hardware and enabling Service Providers to augment existing services with M2M solutions and services.



AirLink Fastrack Xtend

The communication of Schneider Electric's charging terminal is provided by AirVantage Smart Automation and an AirLink™ Fastrack FXT programmable gateway, offering secure and reliable cellular connectivity. The solution also includes a SIM card and Schneider Electric's PLC. Using Smart Automation's remote monitoring and control capabilities, Schneider Electric can manage its dispersed terminals from a central location – troubleshooting problem terminals and maintaining the terminal network without having to send personnel on-site to the EVCS. In addition, Smart Automation provides tools for quick application development, such as a consumer smartphone application that would be used to find a nearby EVCS location and book a terminal in advance, allowing electric vehicle drivers to better prepare for the time required to recharge their vehicles.

Results

Because of the faster time to market, application development tools, remote management and control capabilities and better deployment efficiencies afforded by AirVantage Smart Automation, Schneider Electric will be able to commit to providing a connected electric vehicle charging terminal to the progressive SAVE project and gain a leadership position in the fast growing green/alternative energy market.

AirVantage Smart Automation benefits Schneider Electric's charging terminal by:

- Enabling quick time to market
- Eliminating application development tasks and reducing development efforts
- Providing fast provisioning of the web applications
- Reducing development risk and allowing high scalability
- Enabling remote management and control of dispersed terminals