Using an HID Badge with Electric Vehicle Charging Services (EVCS)

Charging an electric vehicle is a time consuming process unless one connects to a fast or Supercharger. However, not only are the fees higher with a fast or Supercharger, but they seem to create more wear on the battery than slow charging does. Therefore, the best places to charge are where the car can sit for a longer time. Besides your home, the place your car most likely sits the longest is at your workplace.

California is at the forefront when it comes to the use of Electric Vehicles (EV). Companies, public services, utilities and more are building EV charging facilities on their premises. Having a charging station onsite is becoming almost as common as having a coffee machine at your disposal. Employees expect this service and it is one benefit an employer needs to provide in order to attract new hires.

Today, it’s very often the case that the power is provided with no charge to the employees. This is due to various supporting governmental programs and subsidies in place which will eventually end. Considering the cost of energy and the growing number of vehicles, offering a free charge is not sustainable.

An employer with a physical access system in place where a card, or an electronic identity, is used for multiple purposes like parking access, cantina payment and secure printing (just to mention a few) it is possible to use the very same identity for identification and authentication of a person starting an EV charging process.

Secure identification of an authorized user for the EV Charging service limits the usage of the service to employees only. This becomes important when the charging infrastructure is freely accessible like in hospital parking garages or open business areas shared by multiple companies.

HID credentials come in a variety of forms like cards or mobile phone apps. Even wearable devices like rings are regularly used and provide a great user experience. They are managed in a well-established system with a high confidence of authenticity. Enrollment into the EV Charging service is therefore included in the overall identity management.

To identify the individual becomes crucial when it comes to direct payment or a pay slip deduction, processes used in cantina payment. The data has to be creditable and revisable which starts with the identity of a user.
Very similar to the use case of employer and employees would be the landlord and tenant or the hospitality vendor and guests.

- Multi-tenant apartment buildings providing charging services in their adjacent garages will need to secure access with a credential such as the type provided by HID Physical Access Control Solutions.
- A hotel offering a free or payable charging service also needs to make sure only an authorized person makes use of the ability. The hotel room card or the credential in the hotel’s mobile app could be the identifier.

The HID Extended Access Technologies solution includes embedded products like Reader Core, Chipsets or IP Licensing. We enable the reading of secure credentials, whether it is an HID credential or alternatives by other vendors.

For convenience, we can load a credential on a wearable device like a ring or wristband.

We can also provide the credential itself for a non-PACS customer like a hotel where we have several options.

Liberty Access is an HID partner focused on the enterprise market. Their solution connects a number of charge points to their backend cloud system and supports HID credentials as the identification methodology.

**Liberty Access and the Solution**

About: Liberty PlugIns is dedicated to providing easy-to-use, low cost, flexible EV charging systems for shared parking areas. Whether you simply want to limit access to EV-charging, or whether you want to bill for energy usage, review reports and implement utility Demand Response programs—from simple to complex, Liberty PlugIns has your EV charging solution.

Liberty PlugIns is constantly exploring new and emerging standards and methods—like OpenADR that provides a standardized interface for utility demand response programs—to find creative ways to eliminate unnecessary complexity and costs from your EV charging system.

Company website: [www.libertyplugins.com](http://www.libertyplugins.com)

- Size (employees): 79
- Revenue: $18.8 Mio
- Location: Santa Barbara, California
- Private and independent company
- Information: www.owler.com/company/libertyplugins

**Products**

HID is mentioned several times in the video, showing that our credentials have value for Liberty

[www.youtube.com/watch?v=EElEi6oLsBI](http://www.youtube.com/watch?v=EElEi6oLsBI)

- **HYDRA-R**: The HYDRA-R is a smart controller that puts access control, metering, reporting and advanced load management capability in one box.

Here’s an example showing two low-cost, non-network chargers connected to a HYDRA-R controller. For this installation, there are ten chargers, and all now have access control, metering, and online usage reporting, thanks to the HYDRA-R.

Each HYDRA-R operates up to ten (10) EV chargers. And the best part: you choose the charger that works best for you while saving 50% to 70%
of the cost of expensive gas pump style chargers.

- **HYDRA-RX**: The HYDRA-RX is a unique controller that qualified, licensed electricians can install along with the highest power “LEVel 2” EV chargers available (like the Clipper Creek CS-100, 208/240V, 70/80A charger) and EVen higher power DC fast chargers. Like the HYDRA-R, the HYDRA-RX adds access control, precision metering, usage reporting and advanced load management capability to chargers not equipped with these features from the factory.

- **Access-Only Keypad**: The Liberty PlugIns Access-Only Keypad provides a way to limit access to your chargers by certain individuals, and for limited durations of time (minutes, hours or days) that you specify.

- **Liberty Hydra App**: The application is used to manage electric car needs. Liberty Access Technologies allows members to manage when and how much to spend on charging their vehicles.

**Customers**

Liberty PlugIns equipment is running EV chargers across the U.S. and Canada. Liberty PlugIns provides equipment and services to major utility companies, luxury multi-unit dwellings, large employers and many other types of customers with shared parking areas. All of our customers use Liberty PlugIns equipment to simplify parking management by influencing the demand for EV charging, by putting a price on a valuable commodity (transportation fuel).

Our customers enjoy the ability to control who uses their valuable service, and the ability to run reports and use their data in a variety of ways to monitor usage. Some of our customers are using new, innovative electricity rates to ensure that the majority of EV charging load occurs during periods when other electric loads are relatively low, minimizing utility costs.

**Contact**

Chris Outwater, CEO and Founder

Chris is a technology entrepreneur and businessman who has successfully developed, deployed and marketed technological intellectual property over the past 30 years. He has enjoyed longstanding consulting relationships with Ford Motor Company, Disney Corporation, General Motors, McDonald’s, Microsoft and many other firms and institutions in the USA and overseas.

Mr. Outwater has invented, patented and successfully realized a wide range of concepts, products and services.

www.crunchbase.com/person/chris-outwater

**Comment**

Liberty has experience with the use of HID credentials since the identification of a user seen being key.

There is an App as well which offers SDK integration of MA and wearables might be of interest, as well.

Liberty operates on the end user level and would know where the market is heading.