

# vCharM

## Enterprise-Grade Charging Station Management System

### What is vCharM?

vCharM is a charging and load management back end. It is designed to operate many charge points at high availability. Once a charging station has been connected to vCharM, each charge point can be conveniently configured, monitored and controlled.

### Various Use Cases

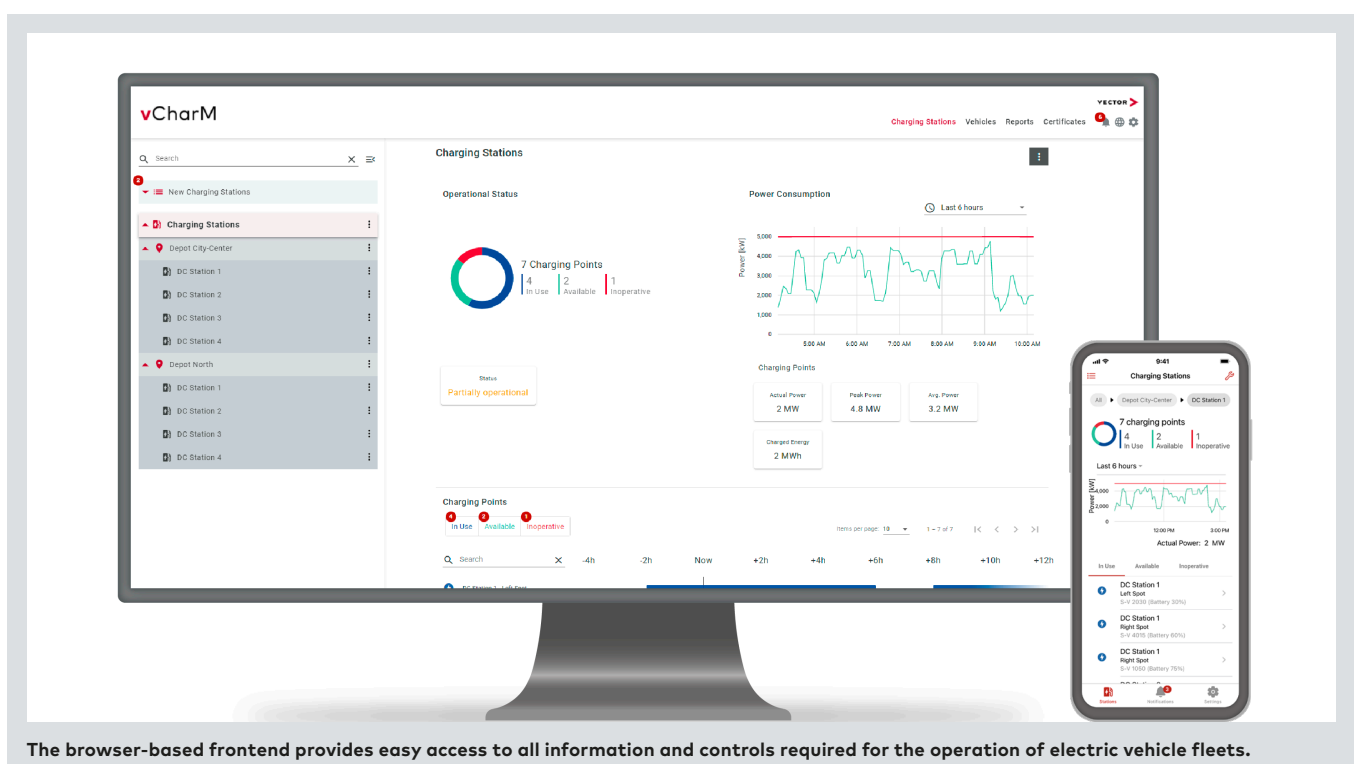
The software can be used to cover a variety of cases: It can be applied to manage the charging stations of fleet depots, in building complexes, companies or shops. vCharM can either be used as a stand-alone software or integrated into an existing fleet or depot management system. Besides managing electric vehicle fleets and semi-public charge points, vCharM provides numerous features tailored to charge point operators and charging station manufacturers.

Moreover, it can also be used for the installation and maintenance of charge points. Depending on the use case the features will be configured.

### Overview of Advantages

- > Charging station manufacturer-independent solution using standardized communication protocols OCPP 1.6J, OCPP 2.0 and OCPP 2.0.1
- > Extension of charging infrastructure step-by-step without vendor lock-in
- > Optimized for fleet operators, company vehicle pools, car parks and other electric vehicle fleets
- > Optimized load management for vehicles with and without smart charging according to ISO 15118 and DIN 70121
- > Connection to fleet management system for automated exchange of vehicle data
- > Vehicle authorization via RFID, PnC, Autocharge and other methods
- > Control of vehicle preconditioning via Value-Added-Service according to VDV 261

More information: [www.vector.com/vcharm](http://www.vector.com/vcharm)



The browser-based frontend provides easy access to all information and controls required for the operation of electric vehicle fleets.

## Core Suite

The solid basis to get you started: Manage and monitor charging sessions for EVs in your company or building complex.

### > Charging Station Administration

Add, configure and monitor your charging stations via OCPP 1.6, 2.0 and 2.0.1.

### > Charging Station Control

Change the availability, restart the charging stations and update their firmware.

### > Notifications

React fast with notifications on events and failures. The event history provides detailed information.

### > Vehicle Authorization

Manage and verify vehicle authorization requests.

### > Reporting

Evaluate the usage of your charging infrastructure with comprehensive reports.

### > Browser User Interface

Keep track of your charging infrastructure via web browser.

### > Role Management

Grant different rights to specific user groups.

### > Mobile App

Stay informed anywhere thanks to our mobile app and push notifications.

## Hosting Variants

vCharM can be operated on a local hardware device and in the cloud. For cloud usage, the hardware device can establish an internet connection between the charging stations and the cloud.

## Add-ons

vCharM grows with your needs!

Add more features whenever you need them.

### > Load Management: Static/Dynamic

Manage the maximum load statically or dynamically and benefit from a variety of charging strategies.

### > Expert Control

Get access to expert functions such as device model editing, log file upload, security certificate management.

### > Clearing Interface

Log billing-relevant data from charging sessions in a lawful manner (CDR) and exchange it with payment systems via OCPI.

### > Plug and Charge

Authorize vehicles without driver interaction based on digital certificates.

### > Whitelabeling

Adapt the look & feel to your corporate identity.

### > Multi-Client Management

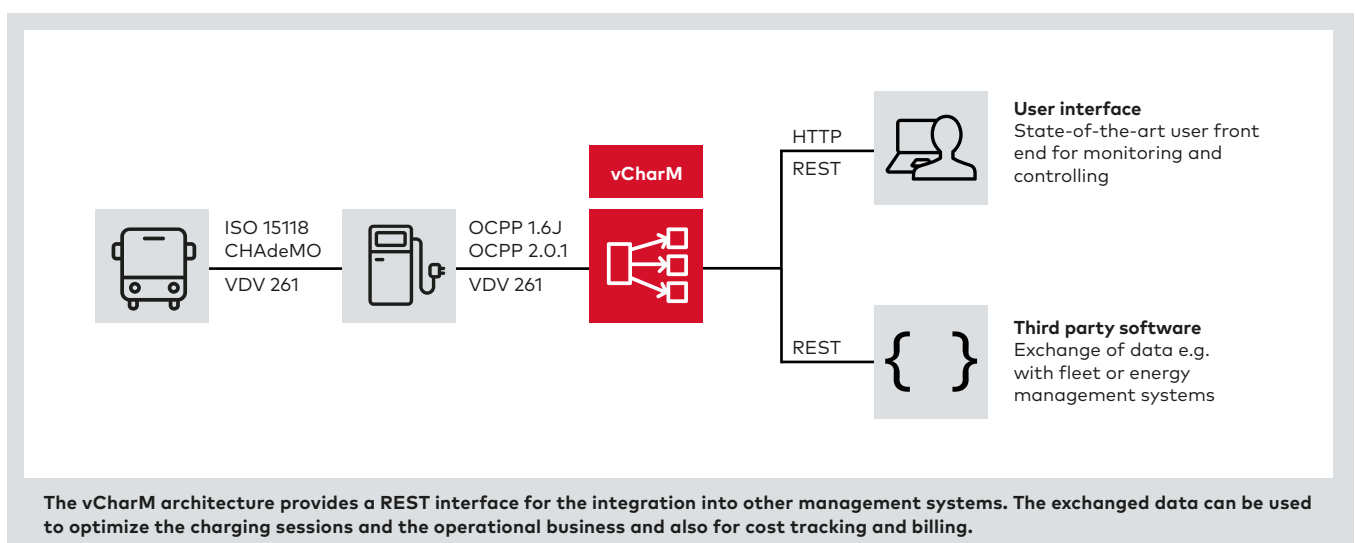
Manage all your customer sites together in one vCharM instance.

### > Data Interface

Automate the data exchange e.g. for important planning data with other management systems.

## Supported Standards

- > OCPP 1.6J, OCPP 2.0 and OCPP 2.0.1
- > VAS/VDV 261
- > VDV 463
- > ISO 15118
- > DIN 70121
- > IEC 61851
- > IEC 63110 (planned)



## Glossary

- API:** Application programming interface
- CDR:** Charge Detail Record
- EMS:** Energy Management System
- OCPP:** Open Charge Point Protocol
- PnC:** Plug & Charge
- REST:** Representational State Transfer
- RFID:** Radio-frequency identification
- VAS:** Value Added Services
- VDV:** Verband Deutscher Verkehrsunternehmen