

Enhancing Fleet Charging

A Robust and Reliable EMS Solution



System Requirements

- Seamless integration with diverse charging equipment using OCPP standards
- Scalable design for easy expansion and flexible configuration
- Real-time monitoring of charging station status, energy use, and user activities
- Intuitive GUI for immediate deployment, streamlining the development process, and facilitating effortless data transfer from edge to cloud

Product Highlights



UC-8200 Series

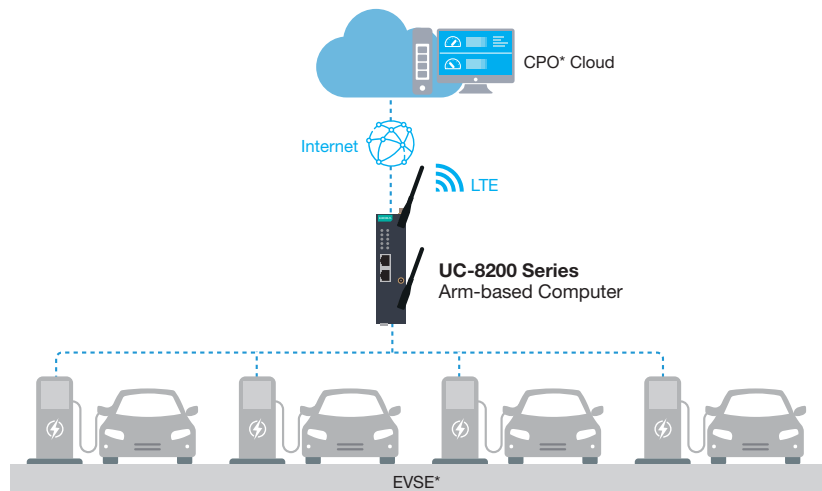
Arm-based Computer

- ISASecure IEC 62443-4-2 Security Level 2 certified, enhanced with Moxa Industrial Linux 3 Secure for cybersecurity
- Ensures stable wireless connection with network keep-alive and failover
- Crash-free file system for robust data protection and system reliability
- Automated failback for seamless network transition during irregularities
- User-friendly GUI streamlines development process for immediate use

Energy Management Systems (EMSs) are at the forefront of EV charging solutions for vehicle fleets. By seamlessly balancing loads, promptly responding to demand, and optimizing charging schedules, EMSs ensure the efficient use of electrical resources. Administrative tasks become easier with automated billing, real-time monitoring, and comprehensive reporting, improving operational efficiency. The core feature is an intelligent central hub that seamlessly integrates a diverse range of charging equipment. The hub uses uniform standards such as OCPP for seamless interoperability between a variety of charging stations and networks. Self-developed interfaces further enhance adaptability, allowing for seamless customization and integration with other platforms. Following the widely recognized OCPP, the EMS establishes a secure and standardized communication protocol between the charging infrastructure and the central management system. This offers Charging Point Operators (CPOs) essential services for a wide range of applications, such as home charging, commercial fleet management, fast charging stations, and more. Tailored configurations cater to unique operational needs, guaranteeing a flexible and dynamic charging ecosystem. Real-time monitoring and comprehensive reporting enables precise performance assessment, accurate billing, and the optimization of charging activities.

Why Moxa

Our UC-8200 Series is a meticulously designed arm-based IPC platform for local EV charging EMS solutions. Built to last, it has Moxa Industrial Linux 3 (MIL3) installed for continuous support. The addition of ISASecure IEC 62443-4-2 Security Level 2 certification ensures a fortified, secure environment. Also, the inclusion of Moxa Industrial Linux 3 Secure strengthens security measures, minimizing potential vulnerabilities. The UC-8200 Series seamlessly integrates with client's EMS software and acts as the central hub for intelligent charging management. This guarantees reliability and resilience, establishing a sturdy base for seamless software integration. As a result, the EMS provides enhanced efficiency and performance in managing EV charging operations.



*CPO: Charging Point Operator
*EVSE: Electric Vehicle Supply Equipment