DIGITAL TRUST IN ELECTRIC VEHICLE CHARGING

Strengthening Security and Authentication in Electric Vehicle Charging

Overview

The importance of digital trust when charging an electric vehicle (EV) is often overlooked, yet it can be just as crucial to the protection of a vehicle and its occupants as physical features such as airbags. In order to achieve digital trust, Electric Vehicle Supply Equipment (EVSE) and EV manufacturers need a scalable and secure solution that complies with industry standards and is responsive to evolving market demands. DigiCert® Device Trust Manager provides a comprehensive security solution for EV charging stations, protecting EVSEs from threats such as operational disruption, data breach/compromise (including customer payment information), and reputational distrust.

Device Trust Manager

DigiCert has collaborated with the SAE working group to deliver support for the ISO 15118 standard. Key features of Device Trust Manager for the EV industry include:

Complies with Standard: Fully compliant with the ISO 15118 standard's communication protocol requirements.

Certificate Management: Governs the issuance and lifecycle of digital certificates that establish and verify the identity of EVs and EVSEs.

Global Revocation: Seamless worldwide revocation through either a Certificate Revocation List (CRL) or Online Certificate Status Protocol (OCSP).

PKI Infrastructure: Support for both single and multi-root architectures delivering secure communication using digital certificates, allowing for Plug & Charge capabilities.



Benefits for the EV Market

Security & Scalability: Securely authenticates EVs and EVSEs, protecting against potential cyber threats while scaling with ease for accelerated time to market.

Trust: Provides confidence in the security of the EV charging process through DigiCert's recognized leadership in digital security.

Flexibility: Provisions and deploys certificates quickly and flexibly with a global infrastructure that allows for support of all certificate types.

Future-Proofing: Adheres to international standards to ensure compatibility with future developments in EV technology and infrastructure.