OCPP 1.6 Full Certificate



Certificate holder: Ampeco LTD.

Certificate number: OCA.0016.0509.CSMS

Product type: Charging Station Management System

Product designation: AMPECO EV Charging Management Platform

OCPP Software version: v.2.103.2

Certification date: October 18, 2023

This certificate attests that the above mentioned product successfully completed certification testing in conformance with the reference specification OCPP 1.6 – Edition 2 with OCPP 1.6 Errata sheet (v4.0 Release, 2019-10-23). The optional features of the protocol are also covered by this certification.

Test cases have been performed as described in the test report referred to below. The results and remarks can be found in the complete test report.

| Applied tests | Performed by / on | Document evidence |
|---|-----------------------|---------------------|
| | | |
| Conformance testing according to the test | DNV Netherlands B.V., | DNV 20231013_Test |
| specification referenced by the test report | October 18, 2023 | Report_AMPECO_v1.04 |
| | | |

The abstract of test report in the Annex is an integral part of this certificate. This certificate is valid from the Certification Date specified above. This certificate is only applicable to the product designation described above and permits the use of the OCPP logo as laid down in the OCA certification logo license agreement on this product only.

This certificate shall neither be tendered nor accepted by any party as a guarantee covering quality of a product which includes OCPP. The Open Charge Alliance, and/or its agents, including, inter-alia, test laboratories, disclaim liability for any damages or losses incurred by the certified company or by any other party resulting from reliance on the results of OCPP certification testing.

For the Open Charge Alliance:

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Authenticity of this certificate can be verified at www.openchargealliance.org



Abstract of test report

Test Result Summary

| Test Report OCPP 1.6 Certification | | | |
|------------------------------------|---------------------------------------|--|--|
| Test laboratory: | DNV | | |
| Location: | Arnhem, The Netherlands | | |
| Test Report Reference: | DNV 20231013_Test Report_AMPECO_v1.04 | | |
| Vendor name: | Ampeco LTD. | | |
| Device Under Test: | CSMS | | |
| Communication: | JSON | | |
| OCPP Software version: | v2.103.2 | | |

Test Result Summary for the certified functionalities OCPP 1.6 Description **Functionalities** Certification Test Results Basic Charging Station functionality for Pass Core booting, authorization (incl. cache if available), configuration, transactions, remote control. Support for (remote) firmware update Firmware Management **Pass** management and diagnostic log file download. Support for Smart Charging (all profile **Smart Charging** Pass types, including stacking), to control charging. Reservation Support for reservation of a connector Pass of a Charging Station. Features to manage a local list in the **Local Authorization List Management** Pass charging station containing authorization data for whitelisting users. Remote Trigger Pass Support for remotely triggering messages that originate from a Charging Station. This can be used for resending messages or for getting the latest information from the Charging Station.

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Performance Measurement Results

| Name | PICS value | Measured value | Description |
|--------------------------|------------|----------------|--|
| OCPP response timeout: | 30 Sec | 3 Sec | The response time for when waiting for an OCPP response message. |
| Response time Authorize: | 60 Sec | 0 Sec | The response time for the Authorize message. |

Test Configuration

| Vendor | Ampeco LTD. | | |
|-----------------------|-----------------|--|--|
| DUT / SUT | CSMS | | |
| Communication | JSON | | |
| OCPP Software version | v2.103.2 | | |
| OCTT version | OCTT 1.6 v1.4.3 | | |

All relevant limits and non-OCPP settings that are relevant for the test laboratory and for the correct functioning of the CSMS:

| Limit / setting | Value |
|--|-------|
| Device supports sending milliseconds in timestamps: | Yes |

Statement of Approval

| Vendor | | Date: 2023-10-18 |
|------------|---------------|------------------|
| Name | Stefan Ivanov | Signature |
| Company | Ampeco | |
| Department | Sales | m |
| Position | CRO | 09 |
| Location | Bulgaria | |

| est laboratory | | | Date: 2023-10-18 |
|----------------|--------------------------------------|---|------------------|
| Name | Casper van der Sluis | | Signature |
| Company | DNV | | 2 |
| Department | Digital System Operations | Г | (100 . |
| Position | Consultant Digital System Operations | Г | (Vd Stus |
| Location | Arnhem | | |