

# OCPP 1.6 Full Certificate



**Certificate holder:** ELVO TECHNOLOGY SRL  
**Certificate number:** OCA.0016.0336.CSMS  
**Product type:** Charging Station Management System  
**Product designation:** ELVO  
OCPP Software version: 1.5  
**Certification date:** April 17, 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
<i>Conformance testing according to the test specification referenced by the test report</i>	<i>DNV Netherlands B.V., April 17, 2023</i>	<i>DNV_20230417_Test Report_Elvo Technology_V104</i>

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:

**ONOPH CARON**  
Chairman

## Abstract of test report

### Test Result Summary

Test Report OCPP 1.6 Certification		
<b>Test laboratory:</b>	DNV	
<b>Location:</b>	Arnhem, The Netherlands	
<b>Test Report Reference:</b>	DNV_20230417_Test Report_Elvo Technology_V104	
<b>Vendor name:</b>	ELVO TECHNOLOGY	
<b>Device Under Test:</b>	CSMS	
<b>Communication:</b>	JSON	
<b>OCPP Software version:</b>	1.5	
Test Result Summary for the certified functionalities		
Functionalities	OCPP 1.6 Certification Test Results	Description
Core	Pass	Basic Charging Station functionality for booting, authorization (incl. cache if available), configuration, transactions, remote control.
Firmware Management	Pass	Support for (remote) firmware update management and diagnostic log file download.
Smart Charging	Pass	Support for Smart Charging (all profile types, including stacking), to control charging.
Reservation	Pass	Support for reservation of a connector of a Charging Station.
Local Authorization List Management	Pass	Features to manage a local list in the 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.

### Performance Measurement Results

Name	PICS value	Measured value	Description
OCPP response timeout:	60 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

<b>Vendor</b>	ELVO TECHNOLOGY
<b>DUT / SUT</b>	CSMS
<b>Communication</b>	JSON
<b>OCPP Software version</b>	1.5
<b>OCTT version</b>	OCTT 1.6 v1.4.3
<b>All relevant limits and non-OCPP settings that are relevant for the test laboratory and for the correct functioning of the CSMS:</b>	
<b>Limit / setting</b>	<b>Value</b>
Device supports sending milliseconds in timestamps:	No

Statement of Approval

Vendor		Date: 17-Apr-2023
Name	Florin Dumitrescu	Signature
Company	Elvo Technology	<i>Florin Dumitrescu</i>
Department	IT	
Position	Architect/Technical Lead	
Location	Bucharest	

Test laboratory		Date: 17-Apr-2023
Name	Casper van der Sluis	Signature
Company	DNV	<i>CvdSluis</i>
Department	Digital System Operations	
Position	Consultant Digital System Operations	
Location	Arnhem	