



Certificate Holder: Elvo Technology
Certificate Number: OCA.0016.1071.CSMS
Product Type: Charging Station Management System
Product Designation: Elvo Platform - CSMS
OCPP Software Version: 1.6-J
Certification Date: June 19, 2025

This certificate attests that the above mentioned product successfully completed certification testing in conformance with the reference specification OCPP 1.6 (Edition 2 FINAL, 2017-09-28 including Errata 2025-04). The optional OCPP protocol features that are covered by this certificate can be found in the Abstract of the Test Report that is part of this certificate.

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

Applied	Performed by / On	Document Evidence
Conformance testing according to the test specification referenced by the test report	DNV June 16, 2025	DNV 20250616 OCPP-1.6-PICS-CSMS-2.0.2 Elvo Technology

The abstract of test report 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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Chairman

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Abstract of the Test Report

Test Report OCPP 1.6 Certification

Test laboratory:	DNV
Location:	Arnhem, The Netherlands
Test Report Reference:	DNV 20250616 OCPP-1.6-PICS-CSMS-2.0.2 Elvo Technology
Product Designation:	Elvo Platform - CSMS
Vendor name:	Elvo Technology
Device Under Test:	Charging Station Management System
OCPP Software Version:	1.6-J
Config ID:	D4A7A98C

Test Result Summary for the Certified Functionalities

Certification Profile	Test Result	Description
Core	Pass	Basic Charging Station functionality for booting, authorization, configuration, transactions, remote control, including basic security.
Firmware Management	Pass	Support for firmware update management and diagnostic log file download.
Local Authorization List Management	Pass	Features to manage a local list in the charging station containing authorization data for whitelisting users.
Smart Charging	Pass	Support for Smart Charging, to control charging.
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.
Reservation	Pass	Support for reservation of a connector of a Charging Station.

Certification Extension	Test Result	Description
Security extension	Pass	Implementation of the whitepaper: Improved security for OCPP 1.6-J



Optional Features

The OCPP specification contains many implementation options that can be selected by a vendor, often in the form of optional message fields or configuration variables, that can be used to support advanced functions. Whereas the certification profiles determine which OCPP functionality is implemented, the features describe how much of a certain functionality in a profile has been implemented. The tables below indicate per certification profiles, for each available optional feature within this profile, whether this has been implemented in this product and tested for conformance or not.

Security

ID	Security Extension	Supported / Present
SEC-1	Security Profile 1: Unsecured Transport with Basic Authentication	Yes
SEC-2	Security Profile 2: TLS with Basic Authentication	Yes
SEC-3	Security Profile 3: TLS with Client Side Certificates	Yes

Additional Questions

ID	Additional Questions for Lab Testing	Answer
AQ-10	Can your CSMS be configured to first respond to a BootNotificationRequest with status Pending or Rejected?	No

Vendor Specific Settings

The table below should contain all relevant OCPP and vendor-specific settings that are relevant for the test laboratory and for the correct OCPP-compliant functioning :

Configuration Setting	Configured Value	Description
Unique Identifier Charging Station	OCTT	
OCPP CSMS URL	ws://dev.elvo.io/ocpp/OCTT	
Connection Timeout	20	
Valid Id Tag	VALID	
Valid Id Tag 2	VALID2	
Parent Id Tag	PARENT	
Invalid Id Tag	INVALID	
Blocked Id Tag	BLOCKED	



Configuration Setting	Configured Value	Description
Expired Id Tag	EXPIRED	
Stack Level	0	
Charging Rate Unit	A	
Expiry Date Offset	20	



Performance Measurement Result

The tables below shows the list of key performance indicators that are measured during the conformance test. The first table indicates the values that the vendor indicates that are valid maximum values for this product. The second table lists the actual performance measurements during the tests performed in a controlled environment.


Name	Max Value	Unit	Description
OCPP response time	10	seconds	The timeout used for exchanging OCPP response messages. Messages to the DUT can be handled within this timeout.
Response time Authorize	10	seconds	The response time for the Authorize message.

Name	Min Value	Max Value	Average Value	Unit
OCPP response time	0.03	0.09	0.04	seconds
Response time Authorize	0.03	0.04	0.03	seconds

Communication technology used during performance measurement	Ethernet/Cloud
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Statement of Approval

Vendor		
Name	Mihail Vidrasc	Date: 2025-06-19
Company	Elvo Technology	Signature:
Department	IT	
Position	CTO	
Location	Bucharest	

Test Laboratory		
Name	Casper van der Sluis	Date: 2025-06-19
Company	DNV	Signature:
Department	Digital System Operations	
Position	Consultant Digital System Operations	
Location	Arnhem, The Netherlands	

OCTT Version	Release_2025-04
OCTT Instance ID	ab4822fffe1a6988ed7b935a749a693c