

# OCPP 1.6 Full Certificate



**Certificate holder:** Hyundai Motor Company

**Certificate number:** OCA.0016.0082.CSMS

**Product type:** Charging Station Management System

**Product designation:** E-CSP CPOS (EV - Charging Service Platform Charge Point Operation System)  
OCPP Software version: 1.0.0

**Certification date:** March 25, 2022

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>Korea Smart Grid Association, March 25, 2022</i>	<i>KSGA_20220325_TestReport_Hyundai Motor Company</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

A blue ink signature of Onoph Caron, Chairman of the Open Charge Alliance.

## Abstract of test report

### Test Result Summary

Test Report OCPP 1.6 Certification	
<b>Test laboratory:</b>	Korea Smart Grid Association
<b>Location:</b>	Seoul / Korea
<b>Test Report Reference:</b>	KSGA-OCPP1.6TEST-033-2022
<b>Vendor name:</b>	HYUNDAI MOTOR COMPANY
<b>Device Under Test:</b>	CSMS
<b>Communication:</b>	JSON
<b>OCPP Software version:</b>	1.0.0

Test Result Summary for the certified functionalities		
Functionalities	OCPP 1.6 Certification Test Results	Description
<b>Core</b>	Pass	Basic Charging Station functionality for booting, authorization (incl. cache if available), configuration, transactions, remote control.
<b>Firmware Management</b>	Pass	Support for (remote) firmware update management and diagnostic log file download.
<b>Smart Charging</b>	Pass	Support for Smart Charging (all profile types, including stacking), to control charging.
<b>Reservation</b>	Pass	Support for reservation of a connector of a Charging Station.
<b>Local Authorization List Management</b>	Pass	Features to manage a local list in the charging station containing authorization data for whitelisting users.
<b>Remote Trigger</b>	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

Performance Measurement Results			
Name	PICS value	Measured value	Description
OCPP response timeout:	60s	00:00:01	The response time for when waiting for an OCPP response message.
Response time Authorize:	60s	00:00:01	The response time for the Authorize message.

### Test Configuration


#### Test Configuration


<b>Vendor</b>	<b>HYUNDAI MOTOR COMPANY</b>
<b>DUT / SUT</b>	CSMS
<b>Communication</b>	JSON
<b>OCPP Software version</b>	1.0.0
<b>OCTT version</b>	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: 2022.03.25
Name	Leo Lee	Signature
Company	HYUNDAI MOTOR COMPANY	
Department	EV Solution Planning Team	
Position	Product Manager	
Location	Seoul, Korea	

Test laboratory		Date: 2022.03.25
Name	Philip YANG	Signature
Company	Korea Smart Grid Association	
Department	Quality Certification Center	
Position	Senior Researcher	
Location	Seoul, Korea	