

# OCPP 1.6 Full Certificate



**Certificate holder:** HKD Green Tech UG  
**Certificate number:** OCA.0016.0357.CSMS  
**Product type:** Charging Station Management System  
**Product designation:** EM-CSMS  
OCPP Software version: 1.1.0  
**Certification date:** May 22, 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., May 22, 2023</i>	<i>DNV 20230522_Test Report_HKD GreenTech_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

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

## Abstract of test report

### Test Result Summary

Test Report OCPP 1.6 Certification		
Test laboratory:	DNV	
Location:	Arnhem	
Test Report Reference:	DNV 20230522_Test Report_HKD GreenTech_v104	
Vendor name:	HKD GreenTech	
Device Under Test:	CSMS	
Communication:	JSON	
OCPP Software version:	1.1.0	
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

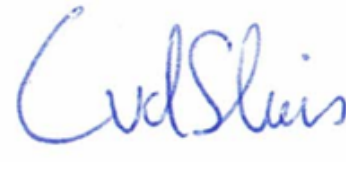
Name	PICS value	Measured value	Description
OCPP response timeout:	60 Sec	2 Sec	The response time for when waiting for an OCPP response message.
Response time Authorize:	60 Sec	0 Sec	The response time for the Authorize message.

### Test Configuration

<b>Vendor</b>	HKD GreenTech
<b>DUT / SUT</b>	CSMS
<b>Communication</b>	JSON
<b>OCPP Software version</b>	1.1.0
<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:	Yes

### Statement of Approval

Vendor		Date: 2023-05-22
Name	Jawad Munir	Signature
Company	HKD Green Tech UG	
Department		
Position	CEO	
Location	Igensdorf, Germany	

Test laboratory		Date: 2023-05-22
Name	Casper van der Sluis	Signature
Company	DNV	
Department	Digital System Operations	
Position	Consultant Digital System Operations	
Location	Arnhem	