

# OCPP 1.6 Full Certificate



**Certificate holder:** ecarPlug Co., Ltd.

**Certificate number:** OCA.0016.0060.CS

**Product type:** Charging Station

**Product designation:** AC/CPT\_OCPP  
OCPP Software version: 1.0.0 / Hardware feature set as stated below

**Certification date:** January 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
Conformance testing according to the test specification referenced by the test report	Korea Smart Grid Association, January 25, 2022	KSGA_20220124_Test Report_EcarPlug

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	
Test laboratory:	Korea Smart Grid Association
Location:	Seoul , Korea
Test Report Reference:	KSGA-OCPP1.6TEST-006-2022
Vendor name:	EcarPlug
Device Under Test:	Charging Station
Communication:	JSON
OCPP Software version:	1.0.0

Test Result Summary for the certified functionalities		
Functionalities	OCPP 1.6 Certification Test Results	Description
<b>Core</b>	<b>Pass</b>	Basic Charging Station functionality for booting, authorization (incl. cache if available), configuration, transactions, remote control.
<b>Optional functionalities</b>		
<b>Firmware Management</b>	<b>Pass</b>	Support for (remote) firmware update management and diagnostic log file download.
<b>Smart Charging</b>	<b>Pass</b>	Support for Smart Charging (all profile types, including stacking), to control charging.
<b>Reservation</b>	<b>Pass</b>	Support for reservation of a connector of a Charging Station.
<b>Local Authorization List Management</b>	<b>Pass</b>	Features to manage a local list in the charging station containing authorization data for whitelisting users.
<b>Remote Trigger</b>	<b>Pass</b>	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 triggered function timeout:	60s	00:00:10	The response time for when waiting for an OCPP function with its corresponding request message. (Firmware update, Diagnostics and Reboot are excluded from this measurement.)
OCPP response timeout:	60s	00:00:38	The response time for when waiting for an OCPP response message.
Response time RemoteStartTransaction:	60s	00:00:00	The response time for the RemoteStartTransaction message.

## Test Configuration

### Test Configuration

<b>Vendor</b>	<b>EcarPlug</b>
<b>DUT / SUT</b>	Charging Station
<b>Communication</b>	JSON
<b>Type</b>	AC/CPT_OCPP
<b>OCPP Software version</b>	1.0.0
<b>OCTT version</b>	OCTT 1.6 v1.4.2

### Hardware feature set

Feature	Configuration
Socket(s) / connector(s)	Multiple
Fixed cable	<Yes>
Communication technology	Mobile Network
RFID readers	Single

### Non-OCPP Charge Point Configuration

Configuration key	Value
< >	< >

All other 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

### OCPP Charging Station Configuration

Configuration key	Value
AllowOfflineTxForUnknownId	TRUE
AuthorizationCacheEnabled	FALSE
AuthorizeRemoteTxRequests	TRUE
BlinkRepeat	5
ClockAlignedDataInterval	60
ConnectionTimeOut	60
ConnectorPhaseRotation	RST
ConnectorPhaseRotationMaxLength	1
GetConfigurationMaxKeys	50
HeartbeatInterval	10
LightIntensity	10
LocalAuthorizeOffline	TRUE
LocalPreAuthorize	FALSE
MaxEnergyOnInvalidId	0
MessageTimeout	300
MeterValuesAlignedData	Energy.Active.Import.Register
MeterValuesAlignedDataMaxLength	10
MeterValuesAlignedDataMaxLength	0
MeterValuesSampledData	Energy.Active.Import.Register
MeterValuesSampledDataMaxLength	1
MeterValueSampleInterval	10
MinimumStatusDuration	0
NumberOfConnectors	1
ResetRetries	3
StopTransactionMaxMeterValues	0
StopTransactionOnEVSideDisconnect	TRUE
StopTransactionOnInvalidId	TRUE
StopTxnAlignedData	Energy.Active.Import.Register
StopTxnAlignedDataMaxLength	0
StopTxnSampledData	Energy.Active.Import.Register
StopTxnSampledDataMaxLength	0
SupportedFeatureProfiles	Core,FirmwareManagement,LocalAuthListManagement,Reservation,SmartCharging,RemoteTrigger
SupportedFeatureProfilesMaxLength	6
TransactionMessageAttempts	3
TransactionMessageRetryInterval	60
UnlockConnectorOnEVSideDisconnect	FALSE
WebSocketPingInterval	0
LocalAuthListEnabled	TRUE
LocalAuthListMaxLength	0
SendLocalListMaxLength	0
ReserveConnectorZeroSupported	FALSE
ChargeProfileMaxStackLevel	3
ChargingScheduleAllowedChargingRateUnit	Ampere
ChargingScheduleMaxPeriods	16
ConnectorSwitch3to1PhaseSupported	FALSE
MaxChargingProfilesInstalled	24
SupportedFileTransferProtocols	http, https

Statement of Approval

Vendor		Date: 2022.01.24
Name	Kwang Seob Shin	Signature 
Company	ecarPlug Co., Ltd.	
Department	President	
Position	CEO	
Location	Seongnam, Korea	

Test laboratory		Date: 2022.01.24
Name	Philip YANG	Signature 
Company	Korea Smart Grid Association	
Department	Quality Certification Center	
Position	Senior Researcher	
Location	Seoul, Korea	