OCPP 1.6 Subset Certificate

Certificate holder: PUMPKIN

Certificate number: OCA.0016.0030.CS

Product type: Charging Station

Product designation: DC Charging Station (eBAB-100AP-C1B-A)
OCPP Software version: 1.1.0

Certification date: October 25, 2021

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 covered by this certificate can be found in the abstract 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 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*, October 25, 2021	*KSGA_20211025_Test Report_PUMPKIN_V104*

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	
Test laboratory:	**Korea Smart Grid Association**
Location:	Seoul , Korea
Test Report Reference:	KSGA_20211025_Test Report_PUMPKIN_V104
Vendor name:	**PUMPKIN**
Device Under Test:	Charging Station
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.
Optional functionalities		
Firmware Management	**N/A**	Support for (remote) firmware update management and diagnostic log file download.
Smart Charging	**N/A**	Support for Smart Charging (all profile types, including stacking), to control charging.
Reservation	**N/A**	Support for reservation of a connector of a Charging Station.
Local Authorization List Management	**N/A**	Features to manage a local list in the charging station containing authorization data for whitelisting users.
Remote Trigger	**N/A**	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	00:00:20	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:	10s	00:00:06	The response time for when waiting for an OCPP response message.
Response time RemoteStartTransaction:	10s	00:00:00	The response time for the RemoteStartTransaction message.

Test Configuration

Test Configuration	
Vendor	**Pumpkin**
DUT / SUT	Charging Station
Communication	JSON
Type	2 Port - each port / Max 500V / Max 200A / Max 100kW
OCPP Software version	1.1.0
OCTT version	OCTT 1.6 V1.4.2

Hardware feature set	
Feature	**Configuration**
Socket(s) / connector(s)	Multiple
Fixed cable	<Yes>
Communication technology	Ethernet
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.	no

OCPP Charging Station Configuration	
Configuration key	**Value**
AllowOfflineTxForUnknownId	FALSE
AuthorizationCacheEnabled	TRUE
AuthorizeRemoteTxRequests	TRUE
BlinkRepeat	10
ClockAlignedDataInterval	15
ConnectionTimeOut	60
ConnectorPhaseRotation	NotApplicable
ConnectorPhaseRotationMaxLength	0
GetConfigurationMaxKeys	20
HeartbeatInterval	180
LightIntensity	20
LocalAuthorizeOffline	FALSE
LocalPreAuthorize	FALSE
MaxEnergyOnInvalidId	2000
MessageTimeout	60
MeterValuesAlignedData	Energy.Active.Import.Interval
MeterValuesAlignedDataMaxLength	20
MeterValuesAlignedDataMaxLength	20
MeterValuesSampledData	Current.Import,Current.Offered, Energy.Active.Import.Register,E nergy.Active.Import.Register,En ergy.Active.Import.Interval,Pow er.Active.Import,Power.Offered ,SoC
MeterValuesSampledDataMaxLength	20
MeterValueSampleInterval	10
MinimumStatusDuration	10
NumberOfConnectors	1
ResetRetries	3
StopTransactionMaxMeterValues	2.147.483.647
StopTransactionOnEVSideDisconnect	TRUE
StopTransactionOnInvalidId	TRUE
StopTxnAlignedData	0
StopTxnAlignedDataMaxLength	20
StopTxnSampledData	0
StopTxnSampledDataMaxLength	20
SupportedFeatureProfiles	Core
SupportedFeatureProfilesMaxLength	1
TransactionMessageAttempts	3
TransactionMessageRetryInterval	10
UnlockConnectorOnEVSideDisconnect	TRUE
WebSocketPingInterval	10
LocalAuthListEnabled	TRUE
LocalAuthListMaxLength	100
SendLocalListMaxLength	100
ReserveConnectorZeroSupported	TRUE
ChargeProfileMaxStackLevel	100
ChargingScheduleAllowedChargingRateUr	Power
ChargingScheduleMaxPeriods	100
ConnectorSwitch3to1PhaseSupported	TRUE
MaxChargingProfilesInstalled	0
SupportedFileTransferProtocols	ftp

Statement of Approval

Vendor		Date: 2021.10.26	
Name	Choi Wonjoon	Signature	
Company	PUMPKIN		
Department	R & D Center		
Position	R & D Center Director		
Location	Namyangju, Korea		

Test laboratory		Date: 2021.10.27	
Name	Philip YANG	Signature	
Company	Korea Smart Grid Association		
Department	Quality Certification Center		
Position	Senior Researcher		
Location	Seoul, Korea		