OCPP 1.6
Subset Certificate

Certificate holder: Tardis Technology

Certificate number: OCA.0016.0246.CS

Product type: Charging Station

Product subtype: Mode 1/2 – only Charging Station

Product designation: evCON-Z1
OCPP Software version: v01.00
Hardware feature set as stated below

Certification date: December 15, 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 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*, December 15, 2022	*KSGA_20221215_Test Report TardisTechnology*

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

<table>
<tr><td colspan="2" align="center">Test Report OCPP 1.6 Certification</td></tr>
<tr><td>Test laboratory:</td><td>Korea Smart Grid Association</td></tr>
<tr><td>Location:</td><td>Seoul , Korea</td></tr>
<tr><td>Test Report Reference:</td><td>KSGA-OCPP1.6TEST-151-2022</td></tr>
<tr><td>Vendor name:</td><td>Tardis Technology</td></tr>
<tr><td>Device Under Test:</td><td>Mode 1/2- only Charging Station</td></tr>
<tr><td>Communication:</td><td>JSON</td></tr>
<tr><td>OCPP Software version:</td><td>v01.00</td></tr>
</table>

<table>
<tr><td colspan="3" align="center">Test Result Summary for the certified functionalities</td></tr>
<tr><td>Functionalities</td><td>OCPP 1.6 Certification Test Results</td><td>Description</td></tr>
<tr><td>Core</td><td>Pass</td><td>Basic Charging Station functionality for booting, authorization (incl. cache if available), configuration, transactions, remote control.</td></tr>
</table>

<table>
<tr><td colspan="3">Optional features</td></tr>
<tr><td>Firmware Management</td><td>N/A</td><td>Support for (remote) firmware update management and diagnostic log file download.</td></tr>
<tr><td>Smart Charging</td><td>N/A</td><td>Support for Smart Charging (all profile types, including stacking), to control charging.</td></tr>
<tr><td>Reservation</td><td>N/A</td><td>Support for reservation of a connector of a Charging Station.</td></tr>
<tr><td>Local Authorization List Managemer</td><td>N/A</td><td>Features to manage a local list in the charging station containing authorization data for whitelisting users.</td></tr>
<tr><td>Remote Trigger</td><td>N/A</td><td>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.</td></tr>
</table>

Performance Measurement Results

Performance Measurement Results			
Name	PICS value	Measured value	Description
OCPP triggered function timeout:	10s	00:00:06	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:	5s	00:00:01	The response time for when waiting for an OCPP response message.
Response time RemoteStartTransaction:	5s	00:00:00	The response time for the RemoteStartTransaction message.

Test Configuration

Test Configuration	
Vendor	Tardis Technology
DUT / SUT	Mode 1/2- only Charging Station
Communication	JSON
Type	evCON-Z1
OCPP Software version	v01.00
OCTT version	OCTT 1.6 v1.4.3

Hardware feature set	
Feature	Configuration
Socket(s) / connector(s)	Single
Fixed cable	<Yes>
Communication technology	Wifi,Ethernet
RFID readers	Single

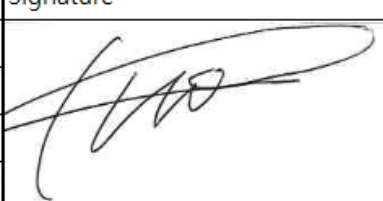| Non-OCPP Charge Point Configuration	
Configuration key	Value
<>	<>

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.	Yes

OCPP Charging Station Configuration

Configuration key	Value
AllowOfflineTxForUnknownId	-
AuthorizationCacheEnabled	-
AuthorizeRemoteTxRequests	TRUE
BlinkRepeat	-
ClockAlignedDataInterval	0
ConnectionTimeOut	30
ConnectorPhaseRotation	-
ConnectorPhaseRotationMaxLength	-
GetConfigurationMaxKeys	3
HeartbeatInterval	20
LightIntensity	-
LocalAuthorizeOffline	FALSE
LocalPreAuthorize	FALSE
MaxEnergyOnInvalidId	-
MessageTimeout	-
MeterValuesAlignedData	Energy.Active.Import.Register
MeterValuesAlignedDataMaxLength	200
MeterValuesSampledData	Energy.Active.Import.Register
MeterValuesSampledDataMaxLength	200
MeterValueSampleInterval	300
MinimumStatusDuration	-
NumberOfConnectors	1
ResetRetries	3
StopTransactionMaxMeterValues	9.999.999
StopTransactionOnEVSideDisconnect	TRUE
StopTransactionOnInvalidId	TRUE
StopTxnAlignedData	-
StopTxnAlignedDataMaxLength	200
StopTxnSampledData	-
StopTxnSampledDataMaxLength	200
SupportedFeatureProfiles	Core
SupportedFeatureProfilesMaxLength	-
TransactionMessageAttempts	3
TransactionMessageRetryInterval	10
UnlockConnectorOnEVSideDisconnect	TRUE
WebSocketPingInterval	-
LocalAuthListEnabled	-
LocalAuthListMaxLength	-
SendLocalListMaxLength	-
ReserveConnectorZeroSupported	-
ChargeProfileMaxStackLevel	-
ChargingScheduleAllowedChargingRateUnit	-
ChargingScheduleMaxPeriods	-
ConnectorSwitch3to1PhaseSupported	-
MaxChargingProfilesInstalled	-
SupportedFileTransferProtocols	-

Statement of Approval

Vendor		Date: 2022.12.15	
Name	Yongkwon Lee	Signature	
Company	TARDIS Technology		
Department	CEO		
Position	CEO		
Location	Jeju, Korea		

Test laboratory		Date: 2022.12.15	
Name	Philip YANG	Signature	
Company	Korea Smart Grid Association		
Department	Quality Certification Center		
Position	Senior Researcher		
Location	Seoul, Korea		