OCPP 1.6 Subset Certificate



Certificate holder: ELECTREE

Certificate number: OCA.0016.0688.CS

Product type: Charging Station

Product designation: ELT-FLD-050-03

OCPP Software version: V16

Hardware feature set as stated below

Certification date: March 28, 2024

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	Accociation	(KSGA)ELECTREE_Test Report_ELT-FLD-050-03_v1.5

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 execution location:	ELECTREE (Bucheon, Korea)		
Test Report Reference:	KSGA-OCPP1.6TEST-017-2024		
Vendor name:	Elec-tree		
Device Under Test:	Charging Station		
Communication:	JSON		
OCPP Software version: V16			
Product designation: ELT-FLD-050-03			

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 features		
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 Manageme	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.

Page 1 from 4



Performance Measurement Results

Name	PICS value	Measured value	Description
OCPP triggered function timeout:	60s	00:00:09	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	00:00:01	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

Vendor	Elec-tree
DUT / SUT	Charging Station
Communication	JSON
Туре	ELT-FLD-050-03
OCPP Software version	V16
OCTT version	OCTT 1.6 v1.4.3

Hardware feature set			
Feature Configuration			
Socket(s) / connector(s)	Multiple		
Fixed cable	<yes></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.	Yes



	Configuration
Configuration key	Value
AllowOfflineTxForUnknownId	TRUE
AuthorizationCacheEnabled	FALSE
AuthorizeRemoteTxRequests	TRUE
BlinkRepeat	-
ClockAlignedDataInterval	0
ConnectionTimeOut	60
ConnectorPhaseRotation	RST
ConnectorPhaseRotationMaxLength	-
GetConfigurationMaxKeys	6
HeartbeatInterval	20
LightIntensity	-
Local Authorize Offline	TRUE
LocalPreAuthorize	FALSE
MaxEnergyOnInvalidId	9999
MessageTimeout	-
MeterValuesAlignedData	_
Meter Values Aligned Data Max Length	3
Meter Values Sampled Data Max Length	Energy.Active.Import.Register
Meter Values Sampled Data Max Length	
	3
MeterValueSampleInterval MinimumStatusDuration	15
	0
Number Of Connectors	2
ResetRetries	5
StopTransactionMaxMeterValues	9999
StopTransactionOnEVSideDisconnect	TRUE
StopTransactionOnInvalidId	TRUE
StopTxnAlignedData	Energy.Active.Import.Register
StopTxnAlignedDataMaxLength	9999
StopTxnSampledData	-
StopTxnSampledDataMaxLength	9999
SupportedFeatureProfiles	Core, Local Auth List Management, Re mote Trigger
SupportedFeatureProfilesMaxLength	-
Transaction Message Attempts	1
Transaction Message Retry Interval	0
UnlockConnectorOnEVSideDisconnect	FALSE
WebSocketPingInterval	300
Local Auth List Enabled	TRUE
Local Auth List Max Length	9999
SendLocalListMaxLength	9999
ReserveConnectorZeroSupported	-
ChargeProfileMaxStackLevel	-
Charging Schedule Allowed Charging Rate Unit	-
Charging Schedule Max Periods	-
	-
ConnectorSwitch3to1PhaseSupported	
ConnectorSwitch3to1PhaseSupported MaxChargingProfilesInstalled	-

Page 3 from 4



Statement of Approval

Vendor		Date : 2024.03.28
Name	Yeonwoo Lee	Signature
Company	Elec-tree	
Department	Research and Development center	100000000000000000000000000000000000000
Position	Director	leeyeonwoo
Location	Seoul, Korea	

Test laboratory		Date : 2024.03.28
Name	Philip YANG	Signature
Company	Korea Smart Grid Association	L ₂
Department	Quality Certification Center	
Position	Chief Researcher	
Location	Seoul, Korea	/