

OCPP 1.6 Subset Certificate



Certificate holder: Klinelex

Certificate number: OCA.0016.0046.CS

Product type: Charging Station

Product designation: KLIN_OCM
OCPP Software version: 1.0.0

Certification date: February 11, 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
<i>Conformance testing according to the test specification referenced by the test report</i>	<i>Korea Smart Grid Association, February 11, 2022</i>	<i>KSGA_20220211_Test Report_Klinelex_V105</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.

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_20220211_Test Report_Klinelex_V105
Vendor name:	Klinelex
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
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 Manager	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	00:00:33	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	00:00:02	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	Klinelex
DUT / SUT	Charging Station
Communication	JSON
Type	KLIN_OCM
OCPP Software version	1.0.0
OCTT version	OCTT 1.6 v1.4.2


Hardware feature set	
Feature	
Socket(s) / connector(s)	Single
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	FALSE
AuthorizationCacheEnabled	FALSE
AuthorizeRemoteTxRequests	TRUE
BlinkRepeat	-
ClockAlignedDataInterval	0
ConnectionTimeOut	25
ConnectorPhaseRotation	RST
ConnectorPhaseRotationMaxLength	0
GetConfigurationMaxKeys	27
HeartbeatInterval	10
LightIntensity	-
LocalAuthorizeOffline	TRUE
LocalPreAuthorize	FALSE
MaxEnergyOnInvalidId	FALSE
MessageTimeout	60
MeterValuesAlignedData	Energy.Active.Import.Register
MeterValuesAlignedDataMaxLength	100
MeterValuesAlignedDataMaxLength	100
MeterValuesSampledData	Energy.Active.Import.Register
MeterValuesSampledDataMaxLength	100
MeterValueSampleInterval	10
MinimumStatusDuration	0
NumberOfConnectors	1
ResetRetries	1
StopTransactionMaxMeterValues	-
StopTransactionOnEVSideDisconnect	FALSE
StopTransactionOnInvalidId	FALSE
StopTxnAlignedData	Energy.Active.Import.Register
StopTxnAlignedDataMaxLength	-
StopTxnSampledData	Energy.Active.Import.Register
StopTxnSampledDataMaxLength	-
SupportedFeatureProfiles	Core,LocalAuthListManagement,SmartCharging
SupportedFeatureProfilesMaxLength	0
TransactionMessageAttempts	1
TransactionMessageRetryInterval	1
UnlockConnectorOnEVSideDisconnect	FALSE
WebSocketPingInterval	60
LocalAuthListEnabled	FALSE
LocalAuthListMaxLength	50
SendLocalListMaxLength	50
ReserveConnectorZeroSupported	FALSE
ChargeProfileMaxStackLevel	30
ChargingScheduleAllowedChargingRateUnit	Ampere
ChargingScheduleMaxPeriods	10
ConnectorSwitch3to1PhaseSupported	-
MaxChargingProfilesInstalled	10
SupportedFileTransferProtocols	ftp, ftps

Statement of Approval

Vendor		Date: 2022.02.11
Name	Lee Hyo Young	Signature
Company	Klinelex Co., Ltd.	
Department	Headquarters	
Position	CEO	
Location	Korea	

Test laboratory		Date: 2022.02.11
Name	Philip YANG	Signature
Company	Korea Smart Grid Association	
Department	Quality Certification Center	
Position	Senior Researcher	
Location	Seoul, Korea	