OCPP 1.6 Subset Certificate



Certificate holder: L3 ELECTRIC POWER

Certificate number: OCA.0016.0561.CS

Product type: Charging Station

Product designation: L3-FC100M2-PMM

OCPP Software version: 1.0.0

Hardware feature set as stated below

Certification date: November 13, 2023

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, November 13, 2023	(KSGA)L3 ELECTRIC POWER_Test Report template_L3-FC100M2- PMM_231107

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:	MODERNTEC Co., Ltd(Changwon, Korea)			
Test Report Reference:	KSGA-OCPP1.6TEST-192-2023			
Vendor name:	L3 ELECTRIC POWER			
Device Under Test:	Charging Station			
Communication:	JSON			
OCPP Software version:	1.0.0			
Product designation:	L3-FC100M2-PMM			

Test Result Summary for the certified functionalities				
Functionalities	OCPP 1.6	Description		
	Certification			
	Test Results			
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	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.		

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Performance Measurement Results

Name	PICS value	Measured value	Description
OCPP triggered function timeout:	60s	00:00:05	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	00:00:03	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

Vendor	L3 ELECTRIC POWER	
DUT / SUT	Charge Point	
Communication	JSON	
Туре	L3-FC100M2-PMM	
OCPP Software version	1.0.0	
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	



OCPP Charging Station Configuration				
Configuration key	Value			
AllowOfflineTxForUnknownId	FALSE			
AuthorizationCacheEnabled	TRUE			
AuthorizeRemoteTxRequests	TRUE			
BlinkRepeat	60			
ClockAlignedDataInterval	60			
Connection TimeOut	60			
ConnectorPhaseRotation	-			
ConnectorPhaseRotationMaxLength	-			
	20			
GetConfigurationMaxKeys				
HeartbeatInterval	60			
LightIntensity	60			
LocalAuthorizeOffline	TRUE			
LocalPreAuthorize	FALSE			
MaxEnergyOnInvalidId	60			
MessageTimeout	-			
MeterValuesAlignedData	-			
MeterValuesAlignedDataMaxLength	20			
MeterValuesSampledData	-			
MeterValuesSampledDataMaxLength	20			
MeterValueSampleInterval	20			
MinimumStatusDuration	60			
NumberOfConnectors	2			
ResetRetries	0			
StopTransactionMaxMeterValues	150			
StopTransactionOnEVSideDisconnect	FALSE			
StopTransactionOnInvalidId	FALSE			
StopTxnAlignedData	-			
StopTxnAlignedDataMaxLength	20			
StopTxnSampledData	-			
StopTxnSampledDataMaxLength	20			
SupportedFeatureProfiles	Core			
SupportedFeatureProfilesMaxLength	-			
TransactionMessageAttempts	0			
TransactionMessageRetryInterval	60			
UnlockConnectorOnEVSideDisconnect	FALSE			
WebSocketPingInterval	60			
LocalAuthListEnabled	-			
LocalAuthListMaxLength	-			
SendLocalListMaxLength	-			
ReserveConnectorZeroSupported	-			
ChargeProfileMaxStackLevel	-			
ChargingScheduleAllowedChargingRateUnit	-			
ChargingScheduleMaxPeriods	-			
ConnectorSwitch3to1PhaseSupported	-			
MaxChargingProfilesInstalled	-			
SupportedFileTransferProtocols	-			

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Statement of Approval

Vendor		Date: 2023.11.13
Name	YUNJONGMIN	Signature
Company	L3 ELECTRIC POWER	MNI
Department	E-mobility lab.	14 50
Position	Chief Reasercher	
Location	Seoul, Korea	

Test laboratory		Date : 2023.11.13
Name Philip YANG		Signature
Company Korea Smart Grid Association		4
Department	Quality Certification Center	
Position	Chief Researcher	
Location	Seoul, Korea	,