OCPP 1.6 Subset Certificate



Certificate holder: JoongAng Control Co., Ltd

Certificate number: OCA.0016.0235.CS

Product type: Charging Station

Product designation: JC-9932-100-811

OCPP Software version: 0.0.1

Hardware feature set as stated below

Certification date: December 2, 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 2, 2022	KSGA_20221202_Test Report_JoongAng Control Co., Ltd

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:

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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-OCPP1.6TEST-138-2022		
Vendor name:	JoongAng Control Co., Ltd		
Device Under Test: Charging Station			
Communication: JSON			
OCPP Software version:	0.0.1		

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 Managemen	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

Performance Measurement Results			
Name	PICS value	Measured value	Description
OCPP triggered function timeout:	150s	0:01:28	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:	30s	00:00:01	The response time for when waiting for an OCPP response message.
Response time RemoteStartTransaction:	30s	00:00:00	The response time for the RemoteStartTransaction message.

Test Configuration

Test Configuration

Vendor	JoongAng Control Co., Ltd
DUT / SUT	Charging Station
Communication	JSON
Туре	JC-9932-100-811
OCPP Software version	0.0.1
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.				



OCPP Charging Station Configuration		
Configuration key	Value	
AllowOfflineTxForUnknownId	TRUE	
AuthorizationCacheEnabled	TRUE	
AuthorizeRemoteTxRequests	TRUE	
BlinkRepeat	-	
ClockAlignedDataInterval	15	
ConnectionTimeOut	30	
ConnectorPhaseRotation	RST	
ConnectorPhaseRotationMaxLength	-	
GetConfigurationMaxKeys	3	
HeartbeatInterval	300	
LightIntensity	300	
LocalAuthorizeOffline	TOUE	
	TRUE	
LocalPreAuthorize	TRUE	
MaxEnergyOnInvalidId	-	
MessageTimeout		
MeterValuesAlignedData	Energy.Active.Import.Register	
MeterValuesAlignedDataMaxLength	8	
	Current.Import, Current.Offered,	
MeterValuesSampledData	Energy.Active.Import.Register,	
·	Power.Active.Import,	
	Power.Offered, SoC, Voltage	
MeterValuesSampledDataMaxLength	8	
MeterValueSampleInterval	20	
MinimumStatusDuration	-	
NumberOfConnectors	2	
ResetRetries	3	
StopTransactionMaxMeterValues	-	
StopTransactionOnEVSideDisconnect	TRUE	
StopTransactionOnInvalidId	TRUE	
	Current.Import, Current.Offered,	
	Energy.Active.Import.Register,	
StopTxnAlignedData	Energy.Active.Import.Interval,	
	Power.Active.Import,	
Contract of the second	Power.Offered, SoC, Voltage	
StopTxnAlignedDataMaxLength	8	
StopTxnAlignedDataMaxLength	8 Current.Import, Current.Offered,	
StopTxnAlignedDataMaxLength StopTxnSampledData	8 Current.Import, Current.Offered, Energy.Active.Import.Register,	
	8 Current.Import, Current.Offered, Energy.Active.Import.Register, Power.Active.Import,	
StopTxnSampledData	8 Current.Import, Current.Offered, Energy.Active.Import.Register, Power.Active.Import, Power.Offered, SoC, Voltage	
StopTxnSampledData StopTxnSampledDataMaxLength	8 Current.Import, Current.Offered, Energy.Active.Import.Register, Power.Active.Import, Power.Offered, SoC, Voltage 8	
StopTxnSampledData StopTxnSampledDataMaxLength SupportedFeatureProfiles	8 Current.Import, Current.Offered, Energy.Active.Import.Register, Power.Active.Import, Power.Offered, SoC, Voltage 8 Core	
StopTxnSampledData StopTxnSampledDataMaxLength SupportedFeatureProfiles SupportedFeatureProfilesMaxLength	8 Current.Import, Current.Offered, Energy.Active.Import.Register, Power.Active.Import, Power.Offered, SoC, Voltage 8 Core 6	
StopTxnSampledData StopTxnSampledDataMaxLength SupportedFeatureProfiles SupportedFeatureProfilesMaxLength TransactionMessageAttempts	8 Current.Import, Current.Offered, Energy.Active.Import.Register, Power.Active.Import, Power.Offered, SoC, Voltage 8 Core 6 2	
StopTxnSampledData StopTxnSampledDataMaxLength SupportedFeatureProfiles SupportedFeatureProfilesMaxLength TransactionMessageAttempts TransactionMessageRetryInterval	8 Current.Import, Current.Offered, Energy.Active.Import.Register, Power.Active.Import, Power.Offered, SoC, Voltage 8 Core 6 2 30	
StopTxnSampledData StopTxnSampledDataMaxLength SupportedFeatureProfiles SupportedFeatureProfilesMaxLength TransactionMessageAttempts TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect	8 Current.Import, Current.Offered, Energy.Active.Import.Register, Power.Active.Import, Power.Offered, SoC, Voltage 8 Core 6 2 30 FALSE	
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StopTxnSampledData StopTxnSampledDataMaxLength SupportedFeatureProfiles SupportedFeatureProfilesMaxLength TransactionMessageAttempts TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval LocalAuthListEnabled	8 Current.Import, Current.Offered, Energy.Active.Import.Register, Power.Active.Import, Power.Offered, SoC, Voltage 8 Core 6 2 30 FALSE 0	
StopTxnSampledData StopTxnSampledDataMaxLength SupportedFeatureProfiles SupportedFeatureProfilesMaxLength TransactionMessageAttempts TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval LocalAuthListEnabled LocalAuthListMaxLength	8 Current.Import, Current.Offered, Energy.Active.Import.Register, Power.Active.Import, Power.Offered, SoC, Voltage 8 Core 6 2 30 FALSE 0	
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Statement of Approval

Vendor		Date: 2022.12.02
Name	Seong-il KIM	Signature
Company	JoongAng Control Co., Ltd	
Department	Software convergence team	lelin
Position	Researcher	- Jacob
Location	Goyang, Korea	

Test laboratory		Date : 2022.12.02
Name	Philip YANG	Signature
Company	Korea Smart Grid Association	4
Department	Quality Certification Center	
Position	Senior Researcher	
Location	Seoul, Korea	/