OCPP 1.6 Subset Certificate



Certificate holder: PNE SYSTEMS inc.

Certificate number: OCA.0016.0504.CS

Product type: Charging Station

Product designation: EVQ-11S-LHW

OCPP Software version: 1.0.0

Hardware feature set as stated below

Certification date: October 18, 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, October 18, 2023	(KSGA)PNE SYSTEMS_Test Report template_EVQ-11S-LHW_231018

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 laboratory:	Korea Smart Grid Association		
Location:	Seoul, Korea		
Test execution location:	PNE SYSTEMS inc.(Suwon, Korea)		
Test Report Reference:	KSGA-OCPP1.6TEST-163-2023		
Vendor name:	PNE SYSTEMS inc.		
Device Under Test:	Charging Station		
Communication:	JSON		
OCPP Software version:	1.0.0		
Product designation:	EVQ-11S-LHW	1	
Tost Posult Summan	for the co	ertified functionalities	
Functionalities			
Functionalities		Description	
	Certification		
Core	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	
Firmware Management	N/A	management and diagnostic log file	
Firmware Management	N/A		
Firmware Management Smart Charging	N/A N/A	management and diagnostic log file download.	
-		management and diagnostic log file download. Support for Smart Charging (all profile	
-		management and diagnostic log file download.	
-		management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging.	
Smart Charging	N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of	
Smart Charging	N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging.	
Smart Charging Reservation	N/A N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of a Charging Station.	
Smart Charging	N/A N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of a Charging Station.	
Smart Charging Reservation	N/A N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of a Charging Station. Features to manage a local list in the charging station containing authorization	
Smart Charging Reservation	N/A N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of a Charging Station.	
Smart Charging Reservation Local Authorization List Management	N/A N/A N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of a Charging Station. Features to manage a local list in the charging station containing authorization data for whitelisting users.	
Smart Charging Reservation	N/A N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of a Charging Station. Features to manage a local list in the charging station containing authorization data for whitelisting users. Support for remotely triggering messages	
Smart Charging Reservation Local Authorization List Management	N/A N/A N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of a Charging Station. Features to manage a local list in the charging station containing authorization data for whitelisting users. Support for remotely triggering messages that originate from a Charging Station.	
Smart Charging Reservation Local Authorization List Management	N/A N/A N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of a Charging Station. Features to manage a local list in the charging station containing authorization data for whitelisting users. Support for remotely triggering messages that originate from a Charging Station. This can be used for resending messages	
Smart Charging Reservation Local Authorization List Management	N/A N/A N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of a Charging Station. Features to manage a local list in the charging station containing authorization data for whitelisting users. 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	
Smart Charging Reservation Local Authorization List Management	N/A N/A N/A	management and diagnostic log file download. Support for Smart Charging (all profile types, including stacking), to control charging. Support for reservation of a connector of a Charging Station. Features to manage a local list in the charging station containing authorization data for whitelisting users. Support for remotely triggering messages that originate from a Charging Station. This can be used for resending messages	

Test Report OCPP 1.6 Certification

Page 1 from 4



Performance Measurement Results

Name	PICS value	Measured value	Description
OCPP triggered function timeout:	90s	00:00:10	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	00:00:01	The response time for when waiting for an OCPP response message.
Response time RemoteStartTransaction:	10s	00:00:01	The response time for the RemoteStartTransaction message.

Test Configuration

Vendor	PNE SYSTEMS inc.
DUT / SUT	Charging Station
Communication	JSON
Туре	EVQ-11S-LHW
OCPP Software version	1.0.0
OCTT version	OCTT 1.6 v1.4.3

Hardware feature set			
Feature Configuration			
Socket(s) / connector(s)	Single		
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	n Configuration		
Configuration key	Value		
AllowOfflineTxForUnknownId	FALSE		
AuthorizationCacheEnabled	FALSE		
AuthorizeRemoteTxRequests	TRUE		
BlinkRepeat	-		
ClockAlignedDataInterval	0		
ConnectionTimeOut	1000		
ConnectorPhaseRotation	RST		
ConnectorPhaseRotationMaxLength	-		
GetConfigurationMaxKeys	20		
HeartbeatInterval	15		
LightIntensity	-		
LocalAuthorizeOffline	FALSE		
LocalPreAuthorize	FALSE		
MaxEnergyOnInvalidId	-		
MessageTimeout	_		
MeterValuesAlignedData	Energy.Active.Import.Register		
MeterValuesAlignedDataMaxLength	10000		
Meter Values Sampled Data	Energy.Active.Import.Register		
Meter Values Sampled Data Max Length	10000		
Meter ValueSampleInterval	20		
MinimumStatusDuration	20		
NumberOfConnectors	1		
ResetRetries	1		
	2.147.483.647		
StopTransactionMaxMeterValues			
StopTransactionOnEVSideDisconnect	TRUE FALSE		
StopTransactionOnInvalidId			
StopTxnAlignedData	Energy.Active.Import.Register		
StopTxnAlignedDataMaxLength	Energy Active Import Register		
StopTxnSampledData	Energy.Active.Import.Register		
StopTxnSampledDataMaxLength	-		
SupportedFeatureProfiles	Core		
SupportedFeatureProfilesMaxLength	-		
TransactionMessageAttempts	1		
TransactionMessageRetryInterval	200		
UnlockConnectorOnEVSideDisconnect	FALSE		
WebSocketPingInterval	60		
Local Auth List Enabled	-		
Local Auth List Max Length	-		
SendLocalListMaxLength	-		
ReserveConnectorZeroSupported	-		
ChargeProfileMaxStackLevel	_		
ChargingScheduleAllowedChargingRateUnit	-		
Charging Schedule Max Periods	-		
	-		
ConnectorSwitch3to1PhaseSupported	-		
MaxChargingProfilesInstalled	-		
Supported File Transfer Protocols	-		



Statement of Approval

Vendor		Date: 2023.10.18
Name	Eunwoo Bae	Signature
Company	PNE SYSTEMS inc.	1
Department	Quality Team	
Position	General manager	\mathcal{M}
Location	Suwon, Korea	<i>y</i> ~

Test laboratory		Date : 2023.10.18
Name	Philip YANG	Signature
Company	Korea Smart Grid Association	6
Department Quality Certification Center		
Position	Chief Researcher	
Location	Seoul, Korea	/