OCPP 1.6
Subset Certificate

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Certified

Certificate holder:	Signet EV
Certificate number:	OCA.0016.0010.CS
Product type:	Charging Station
Product designation:	DC High Power Charger(HDP350K-NCM2), OCPP Software version: Sv2.45c
Certification date:	June 3, 2021

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*, June 3, 2021	*KSGA_20210604_Test Report_Signet EV_V105*

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 Report Reference:	KSGA_20210604_Test Report_Signet EV_V105
Vendor name:	**Signet EV**
Device Under Test:	Charging Station
Communication:	JSON
OCPP Software version:	Sv2.45c

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 Management	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

Name	PICS value	Measured value	Description
OCPP triggered function timeout:	60s	✳ Firmware Update timeout : 0:00:00 ✳ Get Diagonostics timeout : 0:00:00 ✳ Reboot timeout :0:00:00 ✳ OCPP triggered function timeout : 0:00:00	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	00:00:00	The response time for the RemoteStartTransaction message.

Test Configuration

Test Configuration	
Vendor	<Signet EV>
DUT / SUT	Charging Station
Communication	JSON
Type	DC / HDP350K-NCM2
OCPP Software version	Sv2.45c
OCTT version	OCTT 1.6 v1.4.2

Hardware feature set	
Feature	**Configuration**
Socket(s) / connector(s)	Multiple
Fixed cable	<Yes>
Communication technology	Mobile network
RFID readers	One per EVSE

OCPP Charging Station Configuration

Configuration key	Value
AllowOfflineTxForUnknownId	FALSE
AuthorizationCacheEnabled	FALSE
AuthorizeRemoteTxRequests	FALSE
BlinkRepeat	<optional>
ClockAlignedDataInterval	0
ConnectionTimeOut	60
ConnectorPhaseRotation	NotApplicable
ConnectorPhaseRotationMaxLength	0
GetConfigurationMaxKeys	25
HeartbeatInterval	60
LightIntensity	<optional>
LocalAuthorizeOffline	FALSE
LocalPreAuthorize	FALSE
MaxEnergyOnInvalidId	<optional>
MessageTimeout	60
MeterValuesAlignedData	Energy.Active.Import.Register, Current.Import,Voltage,SoC, Power.Active.Import
MeterValuesAlignedDataMaxLength	7
MeterValuesAlignedDataMaxLength	7
MeterValuesSampledData	Energy.Active.Import.Register, Current.Import,Voltage,SoC, Power.Active.Import
MeterValuesSampledDataMaxLength	7
MeterValueSampleInterval	60
MinimumStatusDuration	<optional>
NumberOfConnectors	2
ResetRetries	0
StopTransactionMaxMeterValues	2.147.483.647
StopTransactionOnEVSideDisconnect	FALSE
StopTransactionOnInvalidId	-
StopTxnAlignedData	0
StopTxnAlignedDataMaxLength	0
StopTxnSampledData	0
StopTxnSampledDataMaxLength	0
SupportedFeatureProfiles	Core
SupportedFeatureProfilesMaxLength	4
TransactionMessageAttempts	5
TransactionMessageRetryInterval	60
UnlockConnectorOnEVSideDisconnect	FALSE
WebSocketPingInterval	60
LocalAuthListEnabled	FALSE
LocalAuthListMaxLength	1000
SendLocalListMaxLength	500
ReserveConnectorZeroSupported	TRUE
ChargeProfileMaxStackLevel	20
ChargingScheduleAllowedChargingRateUnit	watt
ChargingScheduleMaxPeriods	24
ConnectorSwitch3to1PhaseSupported	FALSE
MaxChargingProfilesInstalled	20
SupportedFileTransferProtocols	FTP

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.	no

Statement of Approval

Vendor		Date: 2021.06.03	
Name	Kwangyoun CHO	Signature	
Company	Signet EV Inc.		
Department	R&D SI Dept.		
Position	Deputy General Manager		
Location	Goyang-si gyeonggi-do , Korea		

Test laboratory		Date: 2021.06.03	
Name	Philip YANG	Signature	
Company	Korea Smart Grid Association		
Department	Quality Certification Center		
Position	Senior Researcher		
Location	Seoul, Korea		