OCPP 1.6 Subset Certificate



| Certificate holder: Certificate number: | SK Signet Inc. OCA.0016.0194.CS |
|--|--|
| Product type: | Charging Station |
| Product designation: | DC / FC200K-B2-G1 OCPP Software version: OC16-V1.00 Hardware feature set as stated below |
| Certification date: | September 22, 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, September 22, 2022 | KSGA_20220922_Test Report_SKsignet |

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-OCPP1.6TEST-096-2022 | | |
| Vendor name: | SK Signet Inc. | | |
| Device Under Test: | Charging Station | | |
| Communication: | JSON | | |
| OCPP Software version: | OC16-V1.00 | | |
| Test Result Sun | nmary 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 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

| Performance Measurement Results | | | | | | |
|--|---------------------------------------|----------|---|--|--|--|
| Name | PICS value Measured value Description | | | | | |
| OCPP triggered function timeout: | 90s | 00:00:47 | 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: | 60s | 00:00:03 | The response time for when waiting for an OCPP response message. | | | |
| Response time RemoteStartTransaction: | 60s | 00:00:00 | The response time for the RemoteStartTransaction message. | | | |

Test Configuration

| Test Configuration | | | |
|----------------------------------|------------------|--|--|
| | | | |
| Vendor | SK Signet Inc. | | |
| DUT / SUT | Charging Station | | |
| Communication JSON | | | |
| Type DC / FC200K-B2-G1 | | | |
| OCPP Software version OC16-V1.00 | | | |
| OCTT version OCTT 1.6 v1.4.3 | | | |

| Hardware feature set | | | | |
|---|-------------|--|--|--|
| Feature Configuration | | | | |
| Socket(s) / connector(s) | Multiple | | | |
| Fixed cable | <yes></yes> | | | |
| Communication technology Wifi, 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 |
| | |

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| UCPP Charging Station Configuration | | | |
|---|------------------------------------|--|--|
| Configuration key | Yalue | | |
| AllowOfflineTxForUnknownId | TRUE | | |
| AuthorizationCacheEnabled | TRUE | | |
| AuthorizeRemoteTxRequests | TRUE | | |
| BlinkRepeat | - | | |
| ClockAlignedDataInterval | 0 | | |
| ConnectionTimeOut | 60 | | |
| ConnectorPhaseRotation | - | | |
| ConnectorPhaseRotationMaxLength | - | | |
| GetConfigurationMaxKeys | 25 | | |
| HeartbeatInterval | 30 | | |
| LightIntensity | - | | |
| LocalAuthorizeOffline | TRUE | | |
| LocalPreAuthorize | FALSE | | |
| MaxEnergyOnInvalidId | - | | |
| MessageTimeout | - | | |
| MeterValuesAlignedData | - | | |
| MeterValuesAlignedDataMaxLength | 4 | | |
| | Energy.Active.Import.Register,Po | | |
| MeterValuesSampledData | wer.Active.Import,SoC,Power.Offe | | |
| MeterValuesSampledDataMaxLength | 4 | | |
| MeterValueSampleInterval | 30 | | |
| MinimumStatusDuration | - | | |
| NumberOfConnectors | 2 | | |
| ResetRetries | 0 | | |
| StopTransactionMaxMeterValues | 2.147.483.647 | | |
| StopTransactionOnEVSideDisconnect | TRUE | | |
| StopTransactionOnInvalidId | FALSE | | |
| StopTxnAlignedData | | | |
| StopTxnAlignedDataMaxLength | 5 | | |
| otop hannighed batar han bength | Energy.Active.Import.Register,Po | | |
| StopTxnSampledData | wer.Active.Import,Current.Offered, | | |
| | SoC,Power.Offered | | |
| StopTxnSampledDataMaxLength | 5 | | |
| SupportedFeatureProfiles | Core | | |
| SupportedFeatureProfilesMaxLength | 4 | | |
| TransactionMessageAttempts | 5 | | |
| TransactionMessageRetryInterval | 60 | | |
| | FALSE | | |
| VebSocketPingInterval | 60 | | |
| | | | |
| LocalAuthListEnabled | - | | |
| LocalAuthListMaxLength | - | | |
| SendLocalListMaxLength | - | | |
| ReserveConnectorZeroSupported | - | | |
| ChargeProfileMaxStackLevel | - | | |
| ChargingScheduleAllowedChargingRateUnit | - | | |
| ChargingScheduleMaxPeriods | - | | |
| ConnectorSwitch3to1PhaseSupported | - | | |
| MaxChargingProfilesInstalled | - | | |
| | | | |
| SupportedFileTransferProtocols | - | | |

OCPP Charging Station Configuration

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Statement of Approval

| Vendor | | Date: 2022.09.22 |
|------------|---|------------------|
| Name | Kwangyoun Cho | Signature |
| Company | SK Signet Inc. | 11 |
| Department | Software development 2Team / R&D center | 8áQ |
| Position | Team Leader | |
| Location | Seoul, Korea | , , |

| Test laboratory | | Date: 2022.09.22 |
|-----------------|------------------------------|------------------|
| Name | Philip YANG | Signature |
| Company | Korea Smart Grid Association | 6 |
| Department | Quality Certification Center | |
| Position | Senior Researcher | |
| Location | Seoul, Korea | |

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