



Certificate Holder: Ningbo Sanxing Smart Electric Co., Ltd.
Certificate Number: OCA.0016.0960.CSMS
Product Type: Charging Station Management System
Product Designation: SANXING CSMS
OCPP Software Version: 1.6.0
Certification Date: January 14, 2025

This certificate attests that the above mentioned product successfully completed certification testing in conformance with the reference specification OCPP 1.6 (Edition 2 FINAL, 2017-09-28 including Errata v4.0 Release, 2019-10-23). The optional OCPP protocol features that are covered by this certificate can be found in the Abstract of the Test Report that is part 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 this complete test report.

| Applied | Performed by / On | Document Evidence |
|---|---|------------------------------|
| Conformance testing according to the test specification referenced by the test report | DNV Singapore Ptd. Ltd. December 3, 2024 | PICS_PRJ_10534022_ signed |

The abstract of test report 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 the Test Report

Test Report OCPP 1.6 Certification

| | |
|-----------------------------|---|
| Test laboratory: | DNV Singapore Ptd. Ltd. |
| Location: | Singapore |
| Test Report Reference: | Logfiles_PRJ_10534022 |
| Product Designation: | SANXING CSMS |
| Vendor name: | Ningbo Sanxing Smart Electric Co., Ltd. |
| Device Under Test: | Charging Station Management System |
| OCPP Software Version | 1.6.0 |

Test Result Summary for the Certified Functionalities

| Certification Profile | Test Result | Description |
|-------------------------------------|-------------|---|
| Core | Pass | Basic Charging Station functionality for booting, authorization, configuration, transactions, remote control, including basic security. |
| Firmware Management | Pass | Support for firmware update management and diagnostic log file download. |
| Local Authorization List Management | Pass | Features to manage a local list in the charging station containing authorization data for whitelisting users. |
| Smart Charging | Pass | Support for Smart Charging, to control charging. |
| Remote Trigger | Pass | 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. |
| Reservation | Pass | Support for reservation of a connector of a Charging Station. |

Additional Questions

| ID | Additional Questions for Lab Testing: | Supported / Present |
|------|--|---------------------|
| AQ-1 | Can your CSMS be configured to first respond to a BootNotificationRequest with status Pending or Rejected? | No |


Performance Measurement Result

| Name | Max Value | Unit | Description |
|-------------------------|-----------|---------|---|
| OCPP response time | 10 | seconds | The timeout used for exchanging OCPP response messages. Messages to the DUT can be handled within this timeout. |
| Response time Authorize | 10 | seconds | The response time for the Authorize message. |

| Name | Min Value | Max Value | Average Value | Unit |
|-------------------------|-----------|-----------|---------------|---------|
| OCPP response time | 0.21 | 0.93 | 0.24 | seconds |
| Response time Authorize | 0.22 | 0.26 | 0.24 | seconds |

| | |
|---|------|
| Communication technology used during performance measurement: | WiFi |
|---|------|

Statement of Approval

| Vendor | | |
|------------|---|---|
| Name | Niu Zhihan | Date: 2025-01-14 |
| Company | Ningbo Sanxing Smart Electric Co., Ltd. | Signature: |
| Department | Charging Station Development Department |  |
| Position | Project Manager | |
| Location | China | |

| Test Laboratory | | |
|-----------------|-------------------------|---|
| Name | Liu Xinyang | Date: 2025-01-14 |
| Company | DNV Singapore Ptd. Ltd. | Signature: |
| Department | Energy Systems |  |
| Position | Consultant | |
| Location | Singapore | |