

Letter of Attestation

Document: 80203039 **Master Contract:** 203213

Project: 80203039 **Date Issued:** Jun 3, 2024

Issued to: Fronius International GmbH

Guenter Fronius Strasse 1

Wels-Thalheim, Upper Austria, 4600

Austria

Attention: Josef Feichtinger

CSA Group hereby confirms that it has completed an evaluation of:

Transformerless Special Purpose Grid Support Interactive Inverter, Primo GEN24 3.8 208-240; Primo GEN24 3.8 208-240 Plus; Primo GEN24 5.0 208-240; Primo GEN24 5.0 208-240 Plus; Primo GEN24 6.0 208-240, Primo GEN24 6.0 208-240 Plus; Primo GEN24 7.7 208-240; Primo GEN24 7.7 208-240 Plus; Primo GEN24 10.0 208-240 Plus permanently connected.

CSA Group hereby attests that the products identified above and described in test report 80203039 dated May 27, 2024

complies with the following standards/tests, to the extent applicable:

Common Smart Inverter Profile V2.1 with reference to SunSpec IEEE2030.5 Common Smart
Inverter Profile
(CSIP) Conformance Test Procedure V1.3

Issued by: Peter Lim

CSA Group

THIS LETTER OF ATTESTATION DOES NOT AUTHORIZE THE USE OF THE CSA MARK ON THE SUBJECT PRODUCTS.

QUOTATIONS FROM THE TEST REPORT OR THE USE OF THE NAME CSA GROUP OR ITS REGISTERED TRADEMARK, IN ANY WAY, IS NOT PERMITTED WITHOUT PRIOR WRITTEN CONSENT OF CSA GROUP TESTING & CERTIFICATION INC.

Descriptive Report



MASTER CONTRACT: 203213

REPORT: 80203039 **PROJECT:** 80203039

Edition 1: May 27, 2024; Project 80203039 - Richmond

Prepared By: Peter Lim Authorized By: Peter Lim

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Appendix A - Vendor Evidence Letter for E-5000 and E-5036

Appendix B - Testpack

PRODUCTS

Transformerless Special Purpose Grid Support Interactive Inverter, Primo GEN24 3.8 208-240; Primo GEN24 3.8 208-240 Plus; Primo GEN24 5.0 208-240; Primo GEN24 5.0 208-240 Plus; Primo GEN24 6.0 208-240, Primo GEN24 6.0 208-240 Plus; Primo GEN24 7.7 208-240; Primo GEN24 7.7 208-240 Plus; Primo GEN24 10.0 208-240 and Primo GEN24 10.0 208-240 Plus permanently connected.

For detailed information regarding ratings and notes, please refer to Attachment Annex A Ratings.

APPLICABLE REQUIREMENTS:

- 1. Common Smart Inverter Profile V2.1
- 2. SunSpec IEEE 2030.5 Common Smart Inverter Profile (CSIP) Conformance Test Procedures V1.3
- 3. Resolution E-5000 & E-5036.

MARKINGS

Not Applicable. Attestation Project

ALTERATIONS

Not Applicable

FACTORY TESTS

Not Applicable

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MASTER CONTRACT: N/A

REPORT: 80203039 **Page No:** 2 **PROJECT:** 80203039 **Date Issued:** May 27, 2024

DESCRIPTION

CSA Group hereby attests that the products identified above and described in test report 80203039 dated May 23, 2024 complies with the following standards/tests, to the extent applicable: Common Smart Inverter Profile V2.1 with reference to SunSpec IEEE2030.5 Common Smart Inverter Profile (CSIP) Conformance Test Procedure V1.3.

DEVICE(S) UNDER TEST IDENTIFICATION.

Gateway Information:

Gateway milot mation.		
Product Type	CA Rule 21/CSIP DER Client	
Product Name (Aggregator)	Sync 2310	
Product Model	KIOE2300-M5	
Product Object ID	DER-1072	
Software Operation Environment Type	local	
Software Name	Kalkitech SCT	
Software Version	4.20.2 (07-14-2023)	
Software Checksum	758A1927C28004EFDCB04693504D725B	
Operating System	Windows 11	
Operating System Version	10.0.22621	

MASTER CONTRACT: N/A

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Test Tool information:

Tool Company	QualityLogic
Tool Name	IEEE2030.5 Client Tester - FTS
Tool Version	V4.0

TEST SUMMARY

As the gateway used by customer is certified by SunSpec (Bearing Sunspec Certificate Number CS-000031 https://sunspec.org/wp-content/uploads/2020/12/SunSpec-ASE-certificate-CS-000031.pdf) the compatibility testing is as part of IEEE2030.5 conformance testing of the gateway. According to the Resolution E-5000 & E-5036, the following SunSpec CSIP test procedures on the gateway while it is connected to the representative Fronius's inverter model Primo GEN24 10.0 208-240 Plus. The test was conducted using the QualityLogic IEEE 2030.5 Test Harness which implements the test cases that are described in the CSIP Test Procedures document.

TEST CONFIGURATION

Test Scope:

The following tests were performed on inverter. For detailed test cases, refer to section 3.

- Inverter Status (BASIC-028)
- Inverter Meter Reading (BASIC-029)
- Basic Inverter Control Volt/Var (BASIC-006)
- Basic Inverter Control Fixed Power Factor (BASIC-008)
- Basic Inverter Control Volt-Watt (BASIC -011)

TEST ENVIRONMENT

Temperature in the range 15°C to 35°C Yes Relative humidity in the range 20% to 75% Yes

TEST PROCEDURES

The test has been run on May 27, 2024, with QualityLogic Inc. IEEE2030.5 Conformance Test Program. The SunSpec approved QualityLogic Test tools used was the Version 4.0 release of Functional Test Suite Client Tester.

MASTER CONTRACT: N/A

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TEST RESULT

Summary Convention

The following "Result" convention is used in this summary.

Result Items	Description
PASS	All test cases that have been executed have passed.
FAIL	At least one test case has failed.
NOT APPLICABLE	The test case was not applicable to device under test

Summary of Test Results

Test Name	Test Description	Test Result
BASIC-006	Basic Inverter Control (Volt/Var) [C, A, S]	PASS
BASIC-008	Basic Inverter Control (Fixed Power Factor) [C, A, S]	PASS
BASIC-011	Basic Inverter Control (Volt-Watt) [C, A, S]	PASS
BASIC-028	Inverter Status [C, A, S]	PASS
BASIC-029	Inverter Meter Reading [C, A, S]	PASS

TEST HISTORY

Edition: 1 (Project 80203039)

This is an attestation report pertaining meeting Common Smart Inverter Profile V2.1 with reference to SunSpec IEEE2030.5 Common Smart Inverter Profile (CSIP) Conformance Test Procedure V1.3 and providing E-5000 & E-5036 Vendor Evidence Letter. All testing deemed necessary (See summary of test) meets the test requirements mentioned above.

---End of Report---