

## **Letter of Attestation**

**Document:** 80141502 **Master Contract:** 249143

**Project:** 80141502 **Date Issued:** September 23, 2022

Issued to: CSI Solar Co., Ltd.

199 Lushan Road, SND Suzhou

Jiangsu 215129

China

**Attention: Guojun Zhang** 

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

Transformerless Utility Interactive Inverter

Models CSI-7K-S22002-E, CSI-7K-S22002-ED, CSI-8K-S22002-E, CSI-8K-S22002-ED, CSI-9K-S22002-E,

CSI-9K-S22002-ED, CSI-7K-S22003-E and CSI-9K-S22003-E

CSA Group hereby attests that the products identified above and described in test report 80141502 dated September 23, 2022 complies with the following standards/tests, to the extent applicable:

CSA C22.2 No. 107.1-16 - Power Conversion Equipment
UL 1741 - Inverters, Converters, Controllers and Interconnection System Equipment
for Use With Distributed Energy Resources
(Second Edition, Revision Dated February 15, 2018)

IEEE 1547-2003 (R2008) - IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems

IEEE 1547.1-2005(R2011) - IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems.

| issued by. Her | <i>ary Huan</i> Henry Huan |
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## The applicable tests performed as following:

| Requirement |    | Topic       | Test Result |
|-------------|----|-------------|-------------|
| UL1741      | 43 | Temperature | Pass        |

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| Requirement  |          | Торіс  | Test Result |
|--------------|----------|--|-------------|
| CSA 107.1-16 | 6.3      | Temperature (Normal)                               | Pass        |
| UL1741       | 44       | Dielectric Voltage-Withstand Test                  | Pass        |
| CSA 107.1-16 | 6.5      | Dielectric Strength                                | 1           |
| IEEE 1547.1  | 5.5.3    | Dielectric test for paralleling device             | Pass        |
| UL1741       | 45       | Output Characteristics Test                        | Pass        |
| CSA 107.1-16 | 14.3.2   | Output Ratings                                     |             |
| UL1741       | 47.2     | Output Overload Test                               | Pass        |
| CSA 107.1-16 | 6.6.1(e) | Overload   |             |
| UL1741       | 47.3     | Short-Circuit Test                                 | Pass        |
| CSA 107.1-16 | 14.3.9   | AC output short circuit current contribution tests |             |
| UL1741       | 47.4     | DC Input Miswiring Test                            | Pass        |
| CSA 107.1-16 | 13.4.2   | DC Input Reverse Polarity Test                     | 1           |
| UL1741       | 47.5     | Ventilation Test                                   | Pass        |
| CSA 107.1-16 | 6.6.1(c) |  |             |
| CSA 107.1-16 | 6.6.1(b) | Motor Locked                                       |             |
| UL1741       | 47.6     | Component Short- and Open-Circuit                  | Pass        |
| CSA 107.1-16 | 6.6.7    | Component Faults                                   |             |
| UL1741       | 47.8     | Loss of Control Circuit                            | Pass        |
| CSA 107.1-16 | 14.3.6   |  |             |
| UL1741       | 29       | Control Circuits                                   | Pass        |
| UL1741       | 48       | Grounding Impedance Test                           | Pass        |
| CSA No 0.4   | /        | Bonding of electrical equipment                    | 1           |
| UL1741       | 59       | Static Load  | Pass        |
| UL50E        | 8.6      | Hosedown test                                      | Pass        |
| CSA 107.1-16 | 14.3.4   | Test for response to abnormal voltage conditions   | Pass        |
| IEEE 1547.1  | 5.2      | (Before Surge Test)                                |             |
| IEEE 1547.1  | 5.3      | Response to abnormal frequency conditions          | Pass        |
| CSA 107.1-16 | 14.3.4   | (Before Surge Test)                                |             |
| IEEE 1547.1  | 5.4      | Synchronization (Before Surge Test)                | Pass        |

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| Requirement  |          | Торіс  | Test Result |
|--------------|----------|--|-------------|
| IEEE 1547.1  | 5.5.1    | Protection from electromagnetic interference (EMI) test  | Pass        |
| IEEE 1547.1  | 5.5.2    | Surge withstand performance test   | Pass        |
| IEEE 1547.1  | 5.5.2 a) | Surge Withstand on External signal and control Circuits  | Pass        |
| IEEE 1547.1  | 5.5.2 b) | Surge Withstand on EUT power circuits  | Pass        |
| CSA 107.1-16 | 14.3.4   | Test for response to abnormal voltage conditions at extreme temp (Spot check after Surge Test) | Pass        |
| IEEE 1547.1  | 5.2      |  |             |
| IEEE 1547.1  | 5.3      | Response to abnormal frequency conditions at extreme temp (Spot check after Surge Test)        | Pass        |
| CSA 107.1-16 | 14.3.4   |  |             |
| IEEE 1547.1  | 5.4      | Synchronization (After Surge Test)   | Pass        |
| CSA 107.1-16 | 14.3.5   | Unintentional islanding  | Pass        |
| IEEE 1547.1  | 5.7      |  |             |
| CSA 107.1-16 | 10.5.3   | Limitation of dc injection   | Pass        |
| IEEE 1547.1  | 5.6      |  |             |
| IEEE 1547.1  | 5.9      | Open Phase Test  | Pass        |
| IEEE 1547.1  | 5.10     | Reconnect following abnormal condition disconnect  | Pass        |
| CSA 107.1-16 | 14.3.3   | Harmonics  | Pass        |
| IEEE 1547.1  | 5.11     |  |             |

## Note:

1. Due to the product limitation, only applicable tests of the listed standards were performed, refer to TIS report and Test data for the detailed test condition and product ratings.

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.

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