

## **Letter of Attestation**

**Document:** 80141501 **Master Contract:** 249143

**Project:** 80141501 **Date Issued:** September 23, 2022

Issued to: CSI Solar Co., Ltd.

199 Lushan Road, SND Suzhou,

**Jiangsu 215219** 

China

**Attention: Guojun Zhang** 

CSA Group hereby confirms that it has completed an evaluation of: Transformerless Utility Interactive Inverter ModelsCSI-5K-S22002-E, CSI-5K-S22002-ED and CSI-5K-S22003-E

CSA Group hereby attests that the products identified above and described in test report 80141501 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:	Henry Huan Henry Huan
	CSA Group

## The applicable tests performed as following:

Requirement		Topic	Test Result
UL1741	43	Temperature	Pass

DQD 507.10 Rev 2022-08-05



 Document:
 80141501
 Master Contract:
 249143

 Project:
 80141501
 Date:
 September 23, 2022

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	
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	
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	
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 (Before	Pass
CSA 107.1-16	14.3.4	Surge Test)	
IEEE 1547.1	5.4	Synchronization (Before Surge Test)	Pass

DQD 507.10 Rev 2022-08-05 Page: 2



 Document:
 80141501
 Master Contract:
 249143

 Project:
 80141501
 Date:
 September 23, 2022

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 extern temp (Spot check after Surge Test)	Pass
IEEE 1547.1	5.2		
IEEE 1547.1	5.3	Response to abnormal frequency conditions at extern 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 the TIS report and Test data for the detailed test condition and product rating.

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.

DQD 507.10 Rev 2022-08-05 Page: 3