Certificate

of Conformity

Registered No.:

COCPVP12051/21E-01_R1

File reference	Test report No.	Date of issue
PVP12051/21E-01	TRPVP12051/21E/01	2022-06-23

On the basis of the tests undertaken, the samples of the below product(s) have been found to comply with the essential requirements of the referenced specifications at the time the tests were carried out:

Applicant: **Sungrow Power Supply Co., Ltd.**
No. 1699 Xiyou Rd., New & High Technology Industrial Development Zone Hefei, Anhui 230088, P. R. China

Manufacturer: **Sungrow Power Supply Co., Ltd.**
No. 1699 Xiyou Rd., New & High Technology Industrial Development Zone Hefei, Anhui 230088, P. R. China

Factory 1: **Sungrow Power Supply Co., Ltd.**
No. 1699 Xiyou Rd., New & High Technology Industrial Development Zone Hefei, Anhui 230088, P. R. China

Factory 2: **Sungrow Power Supply Co., Ltd.**
No. 608, Changning Avenue, New & High Technology Industrial, Development, Zone, 230088 Hefei City, Anhui Province, PEOPLE'S REPUBLIC OF CHINA

Factory 3: **Sungrow Developers (India) Private Limited**
No. 85, kanmike village, Kengeri hobli, Bangalore South Taluk, 560074 Bangalore, INDIA

Product: GRID-CONNECTED HYBRID INVERTER

Type designation: SH5.0RT, SH6.0RT, SH8.0RT, SH10RT
Three-phase, Firmware version: ARM_SAPPHIRE-H_V11_V01_B; MDSP_SAPPHIRE-H_V11_V01_B

Type of equipment:
- ☒ Interface device
- ☒ Interface protection
- ☒ Static conversion device
- ☐ Rotary generation device

Renewable Energy

ESS-T-012 COC

CNAS 中国认可 产品 PRODUCT CNAS C183-P

TÜV NORD (HANGZHOU) CO., LTD.
Member of TÜV NORD Group
Tel: +86-571-85386989
Fax: +86-571-85386986
www.tuv-nord.com/cn
P.R. China

	Remark: The device is for plants of each power.
Certification program:	BOS-P-01 Rev. 00
Certification fundamental(s):	CEI 0-21:2019-04 "Reference technical rules for the connection of active and passive users to the LV electrical Utilities" See test report for detailed information.
Certification body:	**TÜV NORD (HANGZHOU) CO., LTD.** Room B409, Building 1, No 9 Jiuhuan Road, Shangcheng District, Hangzhou, Zhejiang Province, 310019, China Accredited by CNAS according to ISO/IEC 17065:2012, certificate no. CNAS C183-P.
Testing laboratory:	**Dongguan BALUN Testing Technology Co., Ltd.** Room 104/204/205, Building 1, No. 6, Industrial South Road, Songshan Lake District, Dongguan, Guangdong, China Accredited by CNAS according to ISO/IEC 17025:2017, certificate no. CNAS L14701
Conclusion:	After verifying following documents, it is concluded that the product is in compliance with the requirements of CEI 0-21:2019-04. ☒ ISO 9001 certificate: Certificate no. CN15/21022.00&IN18/05814, issued by SGS United Kingdom Ltd. ☒ Test report of CEI 0-21:2019-04: Report no. BL-DG2220524-B01, issued by Dongguan BALUN Technology Co., Ltd., accredited by CNAS according to ISO/IEC 17025:2017, certificate no. CNAS L14701 ☒ Test report of EMC: Report no. 50345689 001, issued by TÜV Rheinland (Shanghai) Co., Ltd., accredited by CNAS according to ISO/IEC 17025:2017, certificate no. CNAS L3038. Report no. J22-127-WT, issued by Shanghai Inspection and Testing Institute of Instruments and Automation Systems Co., Ltd., accredited by CNAS according to ISO/IEC 17025:2017, certificate no. CNAS L0130

This document is based on the evaluation of the samples of the above mentioned product(s). It does not imply an assessment of the mass-production of the product(s), and it does not permit the use of a TÜV NORD mark. The holder of this document may use it in connection with the related test report(s).

Renewable Energy

中国认可
产品
PRODUCT
CNAS C183-P

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Description of product(s):

Model types ..... :	SH5.0RT	SH6.0RT	SH8.0RT	SH10RT
General information				
Firmware ..... :	ARM_SAPPHIRE-H_V11_V01_B; MDSP_SAPPHIRE-H_V11_V01_B			
PV input				
Vmax PV [V d.c.] ..... :	1000			
Mpp voltage range [V d.c.] ..... :	150 - 950	200 - 950		
Isc PV [A d.c.] ..... :	16/16			16/32
Max. input current [A d.c.] ..... :	12.5/12.5			12.5/25
Overvoltage category (OVC) ..... :	II			
AC output and input parameters				
Rated output voltage [V a.c.] ..... :	220/230/ 240, 3/N/PE			
Raged output frequency [Hz] ..... :	50/60			
Rated output power [W] ..... :	5000	6000	8000	10000
Max. apparent power [VA] ..... :	5000	6000	8000	10000
Max. output current [A a.c.] ..... :	7.6	9.1	12.1	15.2
Max. input power [W] ..... :	12500	15000	18600	20600
Max. input current [A a.c.] ..... :	18.1	21.7	27	30
Power factor cosφ [λ] ..... :	0.8 leading ... 1 ... 0.8 lagging			
Overvoltage category (OVC) ..... :	III			
Battery parameters				
Battery Type ..... :	Lithium			
Voltage range[V d.c.] ..... :	150 - 600			
Max. Charge Current [A d.c.] ..... :	30			
Max. Discharge Current [A d.c.] ..... :	30			
Back-up output parameters:				
Rated output voltage [V a.c.] ..... :	220/230/ 240, 3/N/PE			
Raged output frequency [Hz] ..... :	50/60			

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Max. output power [W] ..... :	5000	6000	8000	10000
Max. output power (battery mode) [W] ..... :	5000	6000	8000	10000
Max. output current [A a.c.] ..... :	7.6	9.1	12.1	15.2

Remark: The inverters listed above may be installed with the following batteries:

The inverters listed above may be installed with the following batteries:			
Manufacturer	Sungrow Power Supply Co., Ltd.		
Accumulator Model / Battery Model	SBR096	SBR128	SBR160
Capacity of each battery module (kWh)	3.2		
Number(s) of battery modules recommended by the manufacturer	3	4	5
Accumulator Model / Battery Model	SBR192	SBR224	SBR256
Capacity of each battery module (kWh)	3.2		
Number(s) of battery modules recommended by the manufacturer	6	7	8

Manufacturer	BYD Company Limited			
Accumulator Model / Battery Model	HVS 5.1	HVS 7.7	HVS 10.2	HVS 12.8
Capacity of each battery module (kWh)	2.56			
Number(s) of battery modules recommended by the manufacturer	2	3	4	5
Accumulator Model / Battery Model	HVM 8.3	HVM 11.0	HVM 13.8	
Capacity of each battery module (kWh)	2.76			
Number(s) of battery modules recommended by the manufacturer	3	4	5	
Accumulator Model / Battery Model	HVM 16.6	HVM 19.3	HVM 22.1	
Capacity of each battery module (kWh)	2.76			
Number(s) of battery modules recommended by the manufacturer	6	7	8	
Note: The batteries are not integrated into the inverter and must be installed according to the local regulations.				

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