VERIFICATION OF COMPLIANCE

No.:	GZES2309017084PV
Applicant:	Ningbo Sunways Technologies Co., Ltd. No.1, Second Road, Green Industrial Zone, Chongshou Town 315334 Cixi, Ningbo, Zhejiang, China
Manufacturer:	Ningbo Sunways Technologies Co., Ltd. No.1, Second Road, Green Industrial Zone, Chongshou Town 315334 Cixi, Ningbo, Zhejiang, China
Product Name:	Hybrid Inverter
Product Description:	Hybrid Inverter used in PV system
Model No.:	STH-4KTL-HT, STH-5KTL-HT, STH-6KTL-HT, STH-8KTL-HT, STH-10KTL-HT, STH-12KTL-HT, STH-4KTL-HT-P, STH-5KTL-HT-P, STH-6KTL-HT-P, STH-8KTL-HT-P, STH-10KTL-HT-P, STH-12KTL-HT-P
Trade Mark:	sunways
Rating:	Refer to page 2 and Page3
Intended Use:	PV System
Protection against Electric Shock:	Class I
Additional Information (if any):	IP 65 Software version: V1.00 Firmware version: V1.00

Sufficient samples of the product have been tested and found to be in conformity with

Test Standard:	Refer to Page3
as shown in the	
Test Report Number(s):	GZES230901708401, GZES230901708402 GZES230901708403, GZES230901708404

This Verification of Compliance has been granted to the applicant based on the results of tests, performed by Laboratory of SGS-CSTC Standards Technical Services Co., Ltd. on sample of the above-mentioned product in accordance with the provisions of the relevant specific standards.

David Guo
Senior Technical Manager
SGS-CSTC

2023-09-26

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Other information added:
Rating:

Product Model	STH-4KTL-HT	STH-5KTL-HT	STH-6KTL-HT	STH-8KTL-HT	STH-10KTL-HT	STH-12KTL-HT
PV Input (DC)						
Max. DC Input Power (W)	5200	6500	7800	10400	13000	15600
Max. DC Voltage (V)	1000					
Start-up input voltage (V)	150		180			
Rated input voltage (V)	620					
MPPT Voltage Range (V)	150 ~ 850		200 ~ 850			
Max. input current (A)	13/13					
Battery Input (DC)						
Battery Type	Lithium Battery (with BMS)					
Battery Voltage Range(V)	140-750					
Max. Charging Current(A)	25					
Max. Discharging Current(A)	25					
Output (AC)						
Max. Output power (W)	4400	5500	6600	8800	11000	13200
Rated Output power (W)	4000	5000	6000	8000	10000	12000
Max. Output Current (A)	6.7	8.3	10	13.3	16.5	20
Rated Output Current (A)	5.8	7.3	8.7	11.6	14.5	17.4
Nominal Grid Voltage (V)	3/N/PE, 230(400)					
Nominal Frequency (Hz)	50 / 60					
Power factor	0.8 leading ~ 0.8 lagging					
Topology	Non-isolated					
Operating temperature range	-30 ~ +60 °C					
Degree of protection	IP65					

SGS-CSTC STANDARDS TECHNICAL SERVICES CO.,LTD. GUANGZHOU BRANCH 电子电气实验室

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Product Model	STH-4KTL-HT-P	STH-5KTL-HT-P	STH-6KTL-HT-P	STH-8KTL-HT-P	STH-10KTL-HT-P	STH-12KTL-HT-P
PV Input (DC)						
Max. DC Input Power (W)	5200	6500	7800	10400	13000	15600
Max. DC Voltage (V)	1000					
Start-up input voltage (V)	150		180			
Rated input voltage (V)	620					
MPPT Voltage Range (V)	150 ~ 850		200 ~ 850			
Max. input current (A)	16/16					
Battery Input (DC)						
Battery Type	Lithium Battery (with BMS)					
Battery Voltage Range(V)	140-750					
Max. Charging Current(A)	25					
Max. Discharging Current(A)	25					
Output (AC)						
Max. Output power (W)	4400	5500	6600	8800	11000	13200
Rated Output power (W)	4000	5000	6000	8000	10000	12000
Max. Output Current (A)	6.7	8.3	10.0	13.3	16.5	20.0
Rated Output Current (A)	5.8	7.3	8.7	11.6	14.5	17.4
Nominal Grid Voltage (V)	3/N/PE, 230(400)					
Nominal Frequency (Hz)	50 / 60					
Power factor	0.8 leading ~ 0.8 lagging					
Topology	Non-isolated					
Operating temperature range	-30 ~ +60 °C					
Degree of protection	IP65					

Test Standard:

IEC 61727:2004. Photovoltaics (PV) systems - Characteristics of the utility interface.
IEC 61683:1999. Photovoltaics systems - Power conditioners - Procedure for measuring efficiency.
IEC 62116:2014. Test procedure of islanding prevention measures for utility-interconnected photovoltaic inverters.
IEC 60068-2-1:2007. Environmental testing. Part 2-1: Tests. Test Ae: Cold.
IEC 60068-2-2:2007. Environmental testing. Part 2-2: Tests. Test Be: Dry heat.
IEC 60068-2-14:2009. Environmental testing. Part 2-14: Tests. Test Nb: Change of temperature.
IEC 60068-2-30:2005. Environmental testing. Part 2-30: Tests. Test Db-Variant 1: Damp heat, cyclic (12 h + 12 h cycle).

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