Test Verification of Conformity

Verification Number: 221100054TPE-001-VOC1

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. This verification is part of the full test report<s> and should be read in conjunction with it <them>.

Applicant Name & Address:	FuturaSun srl Riva del Pasubio, 14 35013 Cittadella (PD) Italy
Product Description:	Hybrid Inverter
Ratings & Principle Characteristics:	See page 2.
Models/Type References:	Optor Single 3 K, Optor Single 3.6 K , Optor Single 5 K, Optor Single 6 K
Brand Names:	FuturaSun
Specification<s>/Standards:	CEI 0-21: 2019-04
Verification Issuing Office Name & Address:	Intertek Testing Services Taiwan Ltd. 5 F, No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan
Date of Tests:	-
Test Report Number(s):	221100054TPE-001

Additional information in Appendix.

Signature

Name: Dan Chen
Position: Manager
Date: 22 Nov. 2022

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APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 221100054TPE-001-VOC1

Manufacture Name & Address: Same as applicant

Ratings & Principle Characteristics:

Ratings	Optor Single 3 K	Optor Single 3.6 K	Optor Single 5 K	Optor Single 6 K
Input DC voltage (V)	125-500Vd.c.			
MPP DC voltage range(V)	150-425Vd.c.			
Input DC current (A)	13Ad.c.+13Ad.c.			
Output AC voltage(V)	230Va.c.			
Output AC current(A)	13.0Aa.c 14.3Aa.c. max	15.7Aa.c 17.2Aa.c. max	21.7Aa.c 23.9Aa.c. max	26.1Aa.c 28.7Aa.c. max
Output power(W)	3000W 3300W max.	3600W 3960W max.	5000W 5500W max.	6000W 6600W max.
Battery operation voltage range (V)	48Vd.c. (40-60Vd.c.)			
Max. charging and discharging current (A)	70Ad.c. Max	90Ad.c. Max	120Ad.c. Max	135Ad.c. Max

Signature

Name: Dan Chen
Position: Manager
Date: 22 Nov. 2022

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Additional information:

The inverter listed above may be installed with following batteries:		
Manufacturer ..... :	JV (Asia Pacific) Limited	Jiangsu Highstar Battery Manufacturing Co..Ltd.
Battery Model ..... :	SDA10-48100	HSD 4870
Capacity of each battery module :	5,12 kWh	3.584 kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-9
Manufacturer ..... :	SHENZHEN GSL ENERGY CO LTD.	
Battery Model ..... :	GSL051200A-B-GBP2	ZN-P48100ESA1
Capacity of each battery module :	10.0 kWh	4.8 kWh
Number of battery module recommended by the manufacturer ..... :	1-4	1-6
Manufacturer ..... :	DAQIN NEW ENERGY TECH (TAIZHOU) Co., LTD.	
Battery Model ..... :	B4850	B3
Capacity of each battery module :	2.4 kWh	3 kWh
Number of battery module recommended by the manufacturer ..... :	2-9	1-9

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Manufacturer ..... :	SHENZHEN UZ ENERGY LIMITED	Shuangdeng Group Co., Ltd
Battery Model ..... :	L051100-A	SDC10-Box 5
Capacity of each battery module :	5.12 kWh	5.12 kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-9
Manufacturer ..... :	Pylon Technologies Co., Ltd.	
Battery Model ..... :	US2000	US3000
Capacity of each battery module :	2.4 kWh	3.5 kWh
Number of battery module recommended by the manufacturer ..... :	2-9	1-9
Manufacturer ..... :	SUNWODA ENERGY	WeCo Srl Italia
Battery Model ..... :	H4850M-P02	4K4 pro
Capacity of each battery module :	2.4 kWh	4.4 kWh
Number of battery module recommended by the manufacturer ..... :	2-9	1-9

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Manufacturer ..... :	WeCo Srl Italia	BST POWER (SHENZHEN) LIMITED
Battery Model ..... :	5K3	MD48-100
Capacity of each battery module :	5.3 kWh	4.8 kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-10
Manufacturer ..... :	BST POWER (SHENZHEN) LIMITED	Shanghai Dowell Technology Co., Ltd
Battery Model ..... :	MD48-50	iPack C3.3
Capacity of each battery module :	2.4 kWh	3.3 kWh
Number of battery module recommended by the manufacturer ..... :	2-10	1-9
Manufacturer ..... :	Shanghai Dowell Technology Co., Ltd.	
Battery Model ..... :	iPack C5	iPack C6.5
Capacity of each battery module :	5.12 kWh	6.5 kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-9

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Manufacturer ..... :	Aobo Environmental Technology Limited	
Battery Model ..... :	Uhome-LFP 2400	Uhome-LFP 5000
Capacity of each battery module :	2.4 kWh	5.0 kWh
Number of battery module recommended by the manufacturer ..... :	2-8	1-8
Manufacturer ..... :	Dongguan PowerAmp Technology Limited	
Battery Model ..... :	ML33RTA	R-P48128EDB2
Capacity of each battery module :	3.3 kWh	6.5 kWh
Number of battery module recommended by the manufacturer ..... :	1-6	1-8
Manufacturer ..... :	SHENZHEN UZ ENERGY LIMITED	Dongguan PowerAmp Technology Limited
Battery Model ..... :	L051100-D	R-P48192EDA1
Capacity of each battery module :	5.12 kWh	9.8 kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-8

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Manufacturer ..... :	Opal Energy Pte Ltd	Shanghai Green Tech Co.,Ltd.
Battery Model ..... :	OPAL-48100LV-ES	GTEF-48V6K-W
Capacity of each battery module :	4.8 kWh	6.2kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-10
Manufacturer ..... :	Shanghai Green Tech Co.,Ltd.	
Battery Model ..... :	GTEF-48V10K-W	GTEM-48V2500-E
Capacity of each battery module :	10.7kWh	2.5kWh
Number of battery module recommended by the manufacturer ..... :	1-10	2-10
Manufacturer ..... :	Shanghai Green Tech Co.,Ltd.	
Battery Model ..... :	GTEM-48V3600-E	GTEM-48V5500-E
Capacity of each battery module :	3.6kWh	5.5kWh
Number of battery module recommended by the manufacturer ..... :	1-10	1-10

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Manufacturer ..... :	Shanghai Green Tech Co.,Ltd.	
Battery Model ..... :	GTEM-48V7600-E	GTEM-48V5500-W
Capacity of each battery module :	7.6kWh	5.5kWh
Number of battery module recommended by the manufacturer ..... :	1-10	1-5
Manufacturer ..... :	Shanghai Green Tech Co.,Ltd.	
Battery Model ..... :	GTEM-48V8700-W	GTEM-48V15000-W
Capacity of each battery module :	8.7kWh	15.2kWh
Number of battery module recommended by the manufacturer ..... :	1-5	1-5
Manufacturer ..... :	Shanghai Green Tech Co.,Ltd.	
Battery Model ..... :	GTEM-48V10800-W	GTEM-48V15000-W-2
Capacity of each battery module :	10.8kWh	15.2kWh
Number of battery module recommended by the manufacturer ..... :	1-5	1-5

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Manufacturer ..... :	GUANGDONG SAKO NEW ENERGY CO.,LTD.	
Battery Model ..... :	SK-51.2V100AH (SK-48V100AH)	SK-51.2V200AH(SK-48V200AH)
Capacity of each battery module :	5.12kWh	10.24kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-4
Manufacturer ..... :	ShenZhen Kweight Technology Co.,Ltd.	
Battery Model ..... :	BM51-100	BM51-200
Capacity of each battery module :	5kWh	10kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-4
Manufacturer ..... :	ShenZhen Kweight Technology Co.,Ltd.	
Battery Model ..... :	BM48100	BM48200
Capacity of each battery module :	5kWh	10kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-4

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Manufacturer ..... :	Shanghai PYTES Energy Co.，Ltd.	
Battery Model ..... :	E-BOX-48100R	E-BOX-48100C
Capacity of each battery module :	5.12kWh	5.12kWh
Number of battery module recommended by the manufacturer ..... :	1-8	1-8
Manufacturer ..... :	Shanghai PYTES Energy Co.，Ltd.	DAQIN NEW ENERGY TECH (TAIZHOU) Co., LTD.
Battery Model ..... :	E-BOX-4850	A48100
Capacity of each battery module :	2.4kWh	4.8kWh
Number of battery module recommended by the manufacturer ..... :	1-8	1-9
Manufacturer ..... :	Shanghai Green Tech Co.,Ltd.	BYD Company Limited
Battery Model ..... :	GTEF-48V3000-E	BATTERY-BOX LV FLEX
Capacity of each battery module :	3.17kWh	5kWh
Number of battery module recommended by the manufacturer ..... :	1-10	1-9

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Manufacturer ..... :	BYD Company Limited	
Battery Model ..... :	BATTERY-BOX LV FLEX LITE	BATTERY-BOX PREMIUM LVS
Capacity of each battery module :	5kWh	4kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-6
Manufacturer ..... :	AlphaESS Co., Ltd.	
Battery Model ..... :	SMILE-BAT-10.1P	SMILE5-BAT
Capacity of each battery module :	10.1kWh	5.7kWh
Number of battery module recommended by the manufacturer ..... :	1-9	1-9
Note: The batteries are not integrated into the inverter and must be installed according to local regulations.		

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