Intertek Legal Entity: Intertek Testing Service Shenzhen Ltd. Guangzhou Branch

Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China

Tel: (86) 20 82139688 Fax: (86) 20 32057538

Test Verification of Conformity

In the basis of the tests undertaken, the sample(s) of the below product have been found to comply with the requirements of the referenced specifications at the time the tests were carried out.

Applicant Name & Address:	**Shenzhen SOFARSOLAR Co., Ltd.** **5L,Fourth Building,Antongda Industrial Park,Liuxian Avenue No.1,Xinan Street,Baoan District,Shenzhen,China.**
Product Description:	**AC-coupled Storage Converter**
Ratings & Principle Characteristics:	**See Annex to Test Verification of Conformity**
Models:	**ME 3000SP**
Brand Name:	SOFAR SOLAR
Relevant Standards	**Engineering Recommendation G83 Issue 2 (December 2012) Recommendations For The Connection Of Type Tested Small-Scale Embedded Generators (Up To 16A Per Phase) In Parallel With Low-Voltage Distribution Systems**
Verification Issuing Office:	**Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China**
Date of Tests:	**10 Oct., 2016 – 25 Oct., 2016**
Test Report Number(s):	**161008073GZU-001**

This verification is part of the full test report(s) and should be read in conjunction with them.

Signature

Name: Tommy Zhong
Position: Assistant Technical Manager
Date: 27 Oct 2016

Intertek Electrical & Wireless China

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Annex to Verification of Conformity

This is an Annex to Test Verification of Conformity with Verification/Report Number(s): 161008073GZU-001. the issuing office is Intertek Testing Services Shenzhen Ltd. Guangzhou Branch (Address: Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China).

Ratings & Principle Characteristics: :

- **Battery Type: Lead-acid, Lithium-ion**
- **Battery Voltage Range: 42-58Vdc**
- **Max. Charging Current: 60A**
- **Max. Discharging Current: 60A**
- **Max. Charging & Discharging Power: 3000VA**
- **Nominal Grid Voltage: 230Vac**
- **Nominal output Voltage (stand-alone): 230Vac**
- **Max. output Current: 13A**
- **Nominal Grid frequency: 50Hz**
- **Power factor: 1 (adjustable +/-0.8)**
- **Ingress protection: IP65**
- **Operating Temperature Range: -25℃ - 60℃**
- **Protective Class: Class I**

Signature

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Date: 27 Oct 2016

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Protection. Voltage tests						
Function	Setting		Trip test		No trip tests	
	Voltage	Time delay	Voltage	Time delay	Voltage /time	Confirm no trip
U/V stage 1	200.1V	2.5s	201.3V	2.54s 2.53s 2.54s 2.52s 2.54s	204.1V 3.5s	No trip
U/V stage 2	184V	0.5s	185.6V	0.525s 0.515s 0.515s 0.520s 0.520s	188V 2.48s	No trip
					180V 0.48s	No trip
O/V stage 1	262.2V	1.0s	261.9V	1.01s 1.03s 1.02s 1.03s 1.01s	258.2V 2.0s	No trip
O/V stage 2	273.7V	0.5s	273.3V	0.515s 0.525s 0.505s	269.7V 0.98s	No trip
					277.7V 0.48s	No trip

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Protection Frequency tests						
Function	Setting		Trip test			
	Frequency	Time delay	Frequency	Time delay	Frequency /time	Confirm no trip
U/F stage 1	47.5Hz	20s	47.48 Hz	20.05s 20.05s 20.00s 20.05s 20.00s	47.7Hz 25s	No trip
U/F stage 2	47Hz	0.5s	46.96Hz	0.522 0.512 0.536 0.522 0.532	47.2Hz 19.98s	No trip
					46.8Hz 0.48s	No trip

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O/F stage 1	51.5Hz	90s	51.52HZ	90.20s 90.20s 90.20s 90.00s 90.20s	51.3Hz 95s	No trip
O/F stage 2	52Hz	0.5s	52.01HZ	0.510s 0.524s 0.514s 0.524s 0.526s	51.8Hz 89.98s	No trip
					52.2Hz 0.48s	No trip

LOSS OF MAINS TEST						
Method used	To be carried out at three output power levels according to BS EN 62116					
Balancing load on islanded network	33% -5% Q Test 22	66% -5% Q Test 12	100% -5% P Test 5	33% +5% Q Test 31	66% +5% Q Test 21	100% +5% P Test 10
Trip time. Limit is 0.5 seconds	201.5ms	209.0ms	288.0ms	263.0ms	288.0ms	287.0ms

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