

TEST REPORT

Applicant : Sigineer Power Limited
Address : Unit 2, 22/F, Richmond Comm. Bldg., 109 Argyle Street, Mongkok, Kowloon, Hongkong
Manufacturer : Dongguan Sigineer Power Electrical Technology CO.,LTD.
Address : 208, 2nd Blvd, 2# Hengdong 2nd Rd, Hengkeng, Liaobu Town, Dongguan City, Guangdong, China, 523413
Product Name : Off-Grid Solar Inverter (Transformless)
Trade Mark : Sigineer Power
Model No. : M5000H-48BP
Test Item / Test procedure used : Environmental testing –Part 2-6: Tests – Test Fc: Vibration (sinusoidal) IEC 60068-2-6: 2007

Date of Receiver : November 20, 2021
Date of Test : November 22, 2021 to November 25, 2021
Date of Issue : December 04, 2021
Test Report Form No : NTCS-IEC60068-2-6-A1
Test Result : Pass *

This Test Report is Issued Under the Authority of :

Compiled by



Bettine Liao / Engineer

Approved by & Authorized Signer



Ryan Luo / Authorized Signatory

*Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of Dongguan Nore Testing Center Co., Ltd. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Copy of marking plate:

The artwork below may be only a draft.

Off-Grid Solar Inverter (Transformless)

Model #: M5000H-48BP

Solar Inverter Mode:
Battery Input: 48VDC,117A
Battery Type: Lead-Acid /GEL/ Lithium
Rated Power: 5000VA/5000W
Surge Output: 200% for 5 seconds.
AC Output: 220/230/240VAC,50/60Hz,22A ϕ 1, Adjustable
Protection Class: I
Degree Of Protection: IP20

AC Charge Mode:
AC Input Voltage: 90-280 VAC \pm 5VAC
AC Input Frequency: 40-65Hz \pm 1Hz
AC Charger Current: 0-80A Adjustable

Solar Charge Mode:
Max PV Input Voltage (VOC): 450VDC
MPPT Voltage Range: 120-430VDC
Nominal PV Input Power: 6000W
Max PV Charge Current: 100A

AC + Solar Charge Mode:
Max Combined Charger Current: 100A
CV/Float Voltage: 48-58.4Vdc Adjustable

DC&AC Transfer Time: 20ms Max
Parallel Capacity: Up to 6 pcs
Communication: WI-FI/GPRS (Optional Accessory Required)

Dongguan Sigineer Power Electrical Technology CO.,LTD.
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Phone: +86 769 82817616
MADE IN CHINA

   
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General conditions for measurement:

The air speed close to the EUT:: 0.2m/s
The ambient temperature:: 24.3°C-25.2°C
Relative humidity:.....: 58%-61%RH
Absolute Pressure.....: 101.2kPa
Preconditioning: The sample have been stored in the ambient laboratory environment for 12h

Possible test case verdicts:

- test case does not apply to the test object: N (N/A)
- test object does meet the requirement: P (Pass)
- test object does not meet the requirement: F (Fail)

General remarks:

"(see Enclosure #)" refers to additional information appended to the report.
"(see appended table)" refers to a table appended to the report.
Throughout this report a comma is used as the decimal separator.

Description:

The product covered by this report is Off-Grid Solar Inverter (Transformless) for Vibration test.
Factory: Dongguan Sigineer Power Electrical Technology CO.,LTD.
Address: 208, 2nd Blvd, 2# Hengdong 2nd Rd, Hengkeng, Liaobu Town, Dongguan City, Guangdong, China, 523413

Test Item: 1. Vibration test.

1. Test Equipment:

Equipment Name	Equipment Model	Equipment No.	Calibration Useful-life
Vibration system	EV206H	NTCS-177	2022-08-31
Temperature & Humidity Meter	HTC-1	NTCS-197	2022-09-05

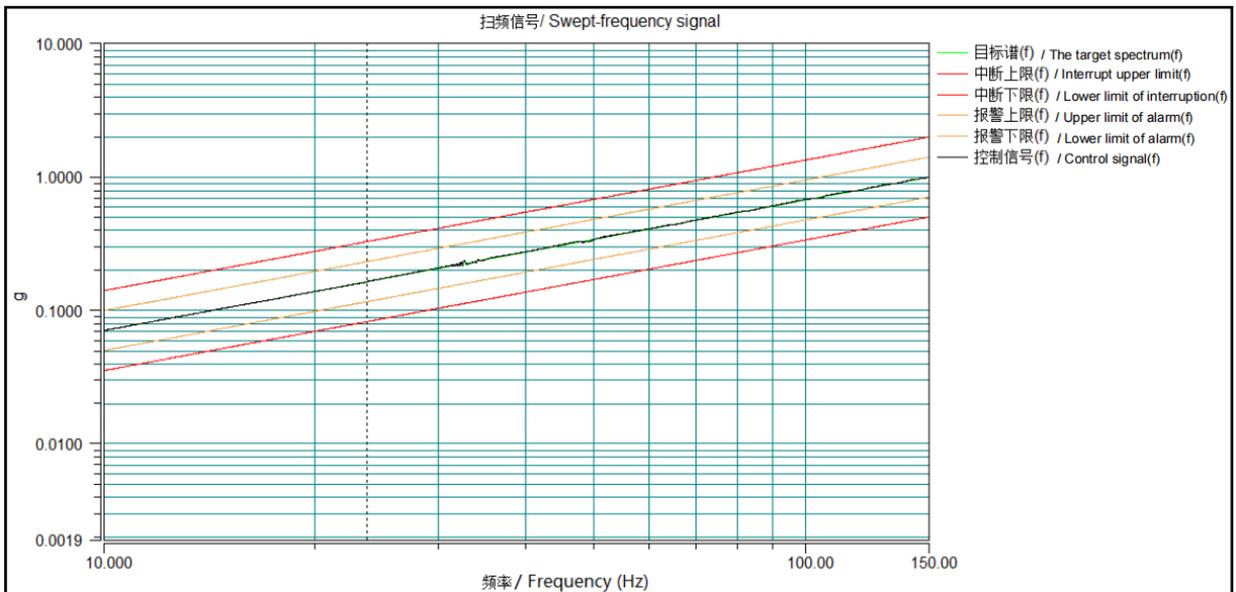
2. Test Result:

Test/Parameter	Requirement	Observation	Remark
Vibration test	1. Laboratory ambience condition: Temperature: 24.3°C-25.2°C (Requirement: 25°C±10°C) Relative humidity: 58%-61%RH (Requirement: 50%± 25% (RH)) 2. Reference document: The test is based on client's specification. 3. The vibration tests would be necessary to use IEC 60068-2-6 Test Fc. Fix the sample on the vibration table, the test condition is as below: --Vibration Frequency:10Hz to 150Hz; --Acceleration: 20m/s ² ; --Sweep speed:1oct/min.; --Vibration orientation: on x, y, z axes --Vibration duration: 30 min. /axis --Amplitude:0.35mm	After the test, the apparatus shall show no damage in the sense of this standard, in particular, no connection or part the loosening of which might impair safety shall have loosened.	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

3. Test axis direction

X axis direction:

Name of test: Vibration test
Test type: Sinusoidal
Spectrum name



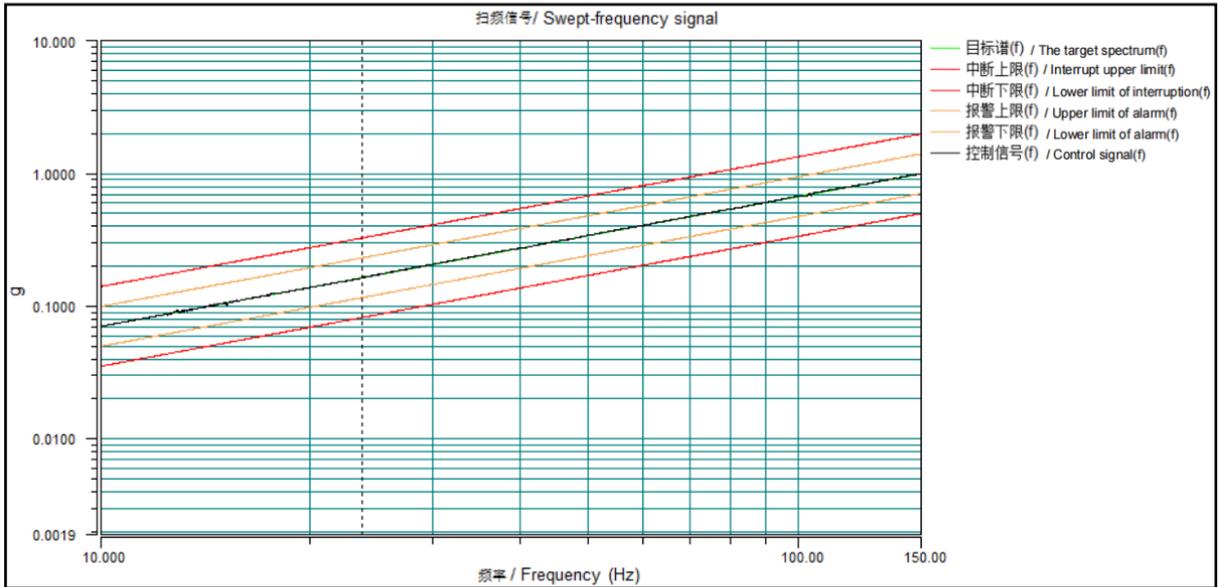
Magnitude: 100 %
Frequency: 23.73640 Hz
Total running time: 00:30:09

Target peak: 0.16429g
Sweep frequency: 1 Oct/Min
The remaining time: 00:00:00

Control peak: 0.16517g
Sweep Type: logarithmic

Y axis direction:

Name of test: Vibration test
 Test type: Sinusoidal
 Spectrum name



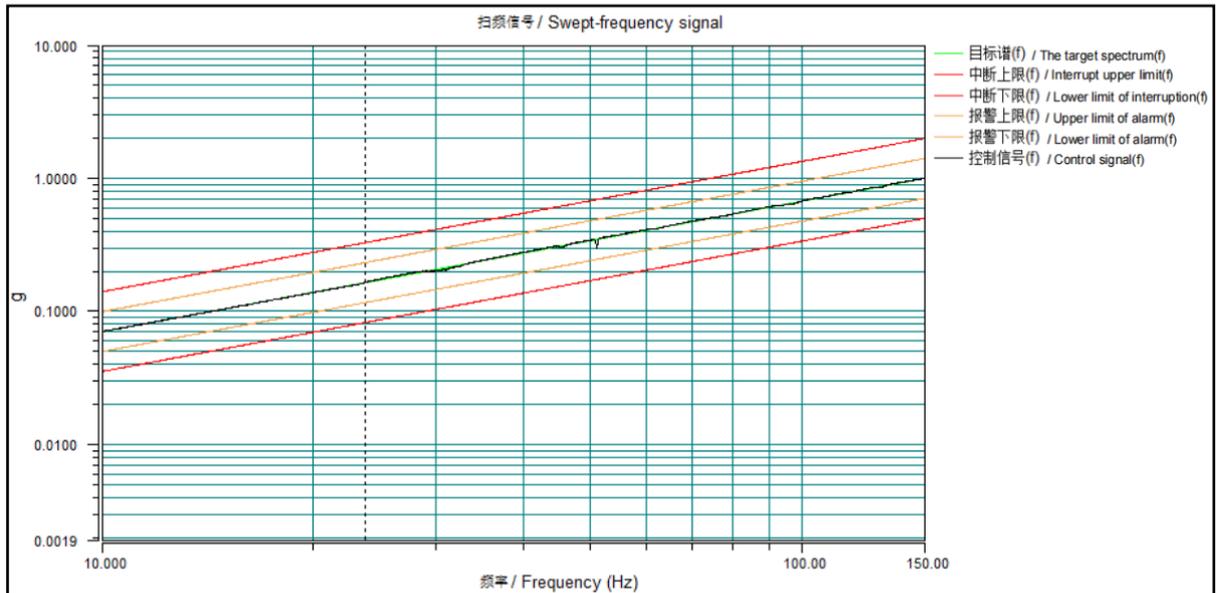
Magnitude: 100 %
 Frequency: 23.73640 Hz
 Total running time: 00:30:09

Target peak: 0.16450g
 Sweep frequency: 1 Oct/Min
 The remaining time: 00:00:00

Control peak: 0.16459g
 Sweep Type: logarithmic

Z axis direction:

Name of test: Vibration test
 Test type: Sinusoidal
 Spectrum name



Magnitude: 100 %
 Frequency: 23.73640 Hz
 Total running time: 00:30:09

Target peak: 0.16450g
 Sweep frequency: 1 Oct/Min
 The remaining time: 00:00:00

Control peak: 0.16615g
 Sweep Type: logarithmic

Appendix: Test Pictures

Vibration test set up:



Before the test



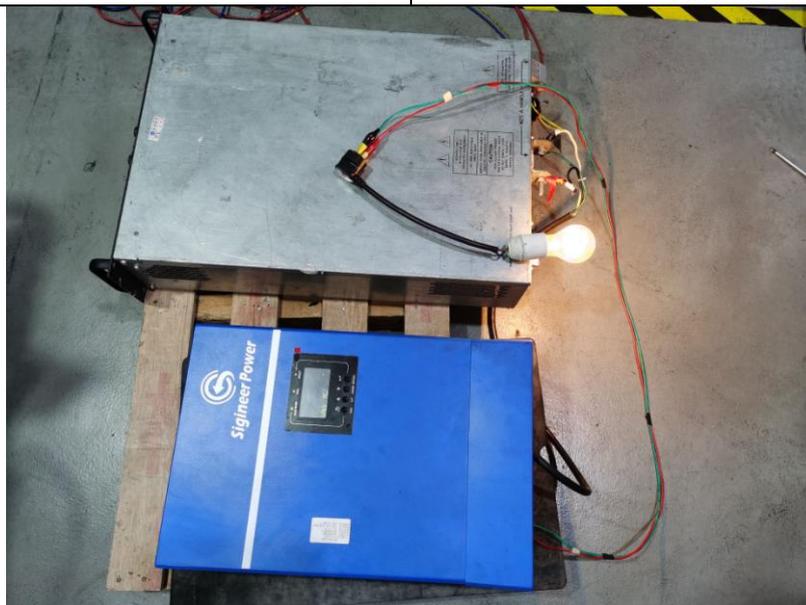
Before the test



In the test



In the test



After the test, the appearance of the sample is intact without damage, the mechanical integrity is good, the EUT set works normally at rated power input.

--- END OF THIS REPORT---