



# CLEVE HILL SOLAR PARK

ENVIRONMENTAL STATEMENT  
VOLUME 4 - TECHNICAL APPENDIX A12.7  
INVERTER NOISE EMISSION DATA

November 2018  
Revision A

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# Acoustic Test Report

**Product Name:** Solar Inverter

**Product Model:** SUN2000-90KTL-H0  
SUN2000-90KTL-H1  
SUN2000-95KTL-INH0  
SUN2000-100KTL-H0  
SUN2000-100KTL-H1

**Applicant:** Huawei Technologies Co., Ltd.  
**Address:** Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C  
**Product Name:** Solar Inverter  
**Product Model:** SUN2000-90KTL-H0  
SUN2000-90KTL-H1  
SUN2000-95KTL-INH0  
SUN2000-100KTL-H0  
SUN2000-100KTL-H1

**Date of Receipt Sample:** 2017-12-16  
**Start Date of Test:** 2017-12-18  
**End Date of Test:** 2018-01-13



**Test Result:** Pass

**Approved by Senior Engineer:** 2018-01-15 Sun changshuan

Date Name

**Prepared by:** 2018-01-15 Xu minghui

Date Name

**Modification Record**

No.	Last Report No.	Modification Description
1	NA	First report



**CONTENT**

1 General Information .....5  
1.1 Standard Compliance .....5  
1.2 Test Location.....5  
1.3 Testing Environment Condition .....5  
2 Test Results .....6  
2.1 Test Items and Results .....6  
2.2 Test Instruments .....6  
2.3 Auxiliary Equipment .....6  
3 Product Specification .....6  
3.1 Main Product Specification .....6  
3.2 Product Configuration and Test Setup.....7  
4 Detailed Test Data .....7  
4.1 Acoustic Test.....7  
5 Test Photos .....8

**1 General Information**

<b>1.1 Standard Compliance</b>	
Test Methods:	
<b>1.2 Test Location</b>	
Test Location:	GCTC Laboratory of Shanghai Huawei Technologies Co., Ltd.
Address:	NO.2222, Xinqinqiao Road, Pudong District, Shanghai, 201206, P.R.C
<b>1.3 Testing Environment Condition</b>	
Ambient Temperature:	+20°C to +25°C
Relative Humidity:	45% to 55%
Atmospheric Pressure:	101kPa

**2 Test Results**

**2.1 Test Items and Results**

Table 1 Test items and results

SN	Test Item	Standard Compliance	Test Parameter	Result
19	Acoustic test	NB/T 32004	+25°C, cubical measurement surface, sound pressure $L_w$ dB(A) $\leq$ 55 dB(A)	Pass

**2.2 Test Instruments**

Table 2 List of test instruments

Test Instrument	Model	Manufacturer	Asset Number	Calibration Date	Calibration Interval (month)
Acoustical measurement instrument	MF02PN	BBM	3606111719	2017-07-31	12

**2.3 Auxiliary Equipment**

Table 3 List of test auxiliary instruments

Name	Model	Manufacturer	(Asset) number	Calibration Date	Calibration Interval (month)
PV source	N8957APV	Keysight	DE16431819	2017-10-30	12
PV source	N8957APV	Keysight	DE16391780	2017-08-14	12
PV source	N8957APV	Keysight	DE16391779	2017-08-14	12
PV source	N8957APV	Keysight	DE16391778	2017-10-30	12
PV source	N8957APV	Keysight	DE16391777	2017-08-14	12

**3 Product Specification**

**3.1 Main Product Specification**

Table 4 Main product specification

Rated Input Voltage	1080V DC
Rated Power	100 KW
Dimensions of the Sample	1075 mm (W) × 310 mm (D) × 605 mm (H)
Weight of the Sample	76kg
Sample Assembly Level	Module
Quantity of the Packaged Sample	1 set

### 3.2 Product Configuration and Test Setup

#### 3.2.1 Product Configuration

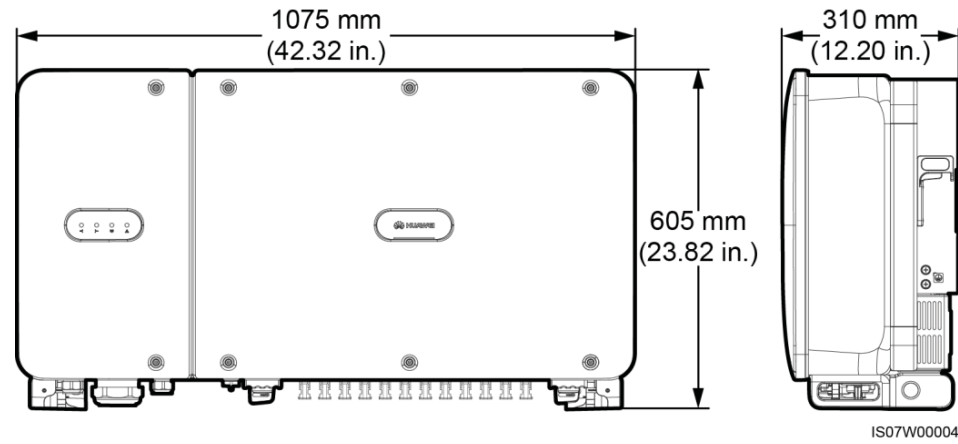


Figure 1. Test Configuration

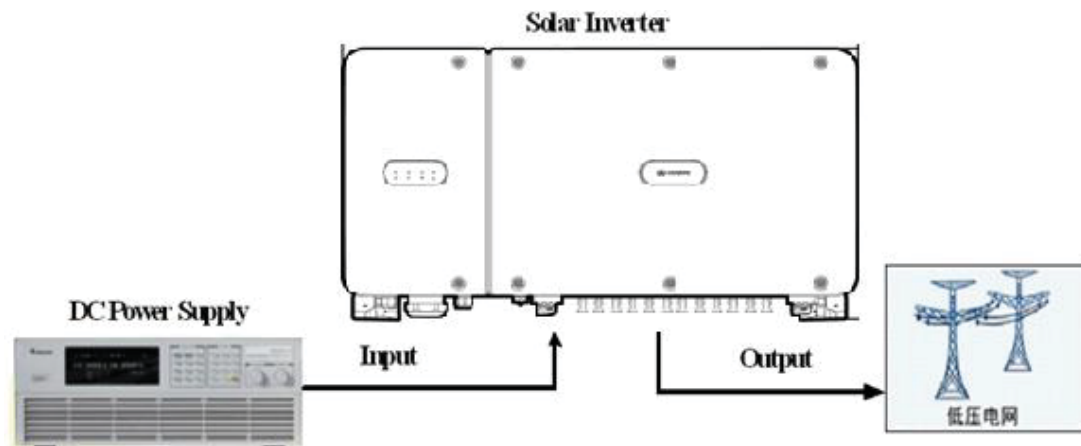


Figure 2. Test Setup

### 4 Detailed Test Data

#### 4.1 Acoustic Test

##### 4.1.1 Test Procedure

- 1) Put the sample in the center of the hemi-anechoic room.
- 2) The locations of microphones are lay as the following figure.
- 3) Measure the background noise.
- 4) Power on the EUT, then adjust fan speed.
- 5) Record the data of the measurement points, and then calculate the sound power level.  $d=1m$

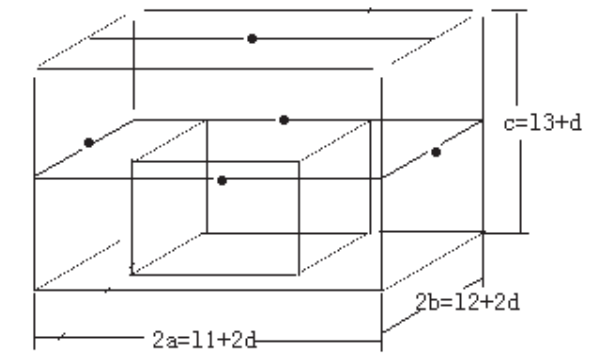


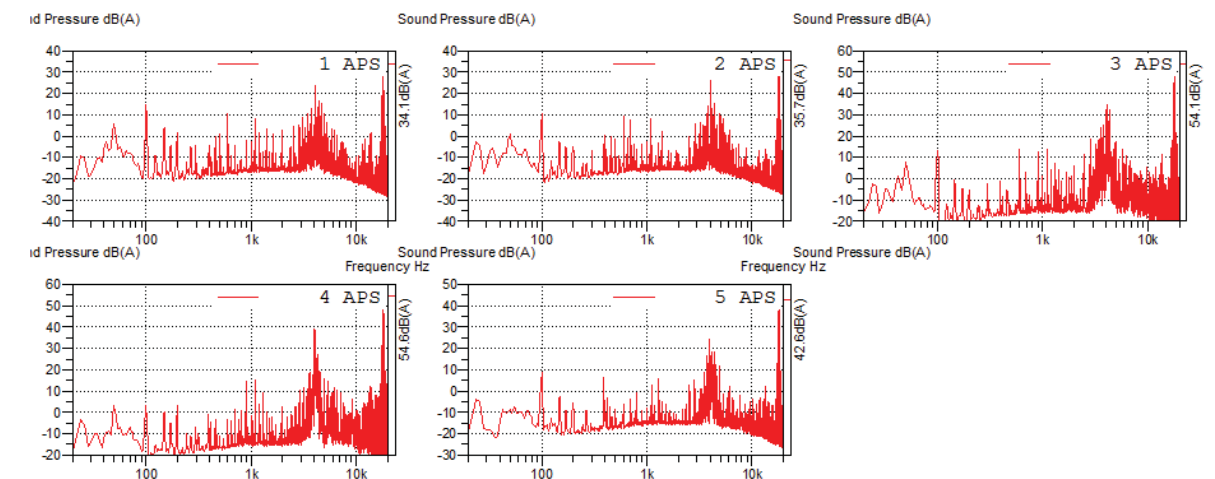
Figure 3. The locations of microphones

#### 4.1.2 Detailed Test Data

- 1) Sound pressure level produced by equipment while the rotational speed of air moving devices within the equipment under test be set to the speed that the devices would run at when the equipment is operating in an ambient temperature equal to +23°C.

Table 5 Detailed test data of acoustic test

Test Item	Measurement Point	Sound Pressure Level (dB(A))
5 chans	1	34.1
	2	35.7
	3	54.1
	4	54.6
	5	42.6
Qualification criterion	≤55dBA	
Test result	Pass	



### 5 Test Photos

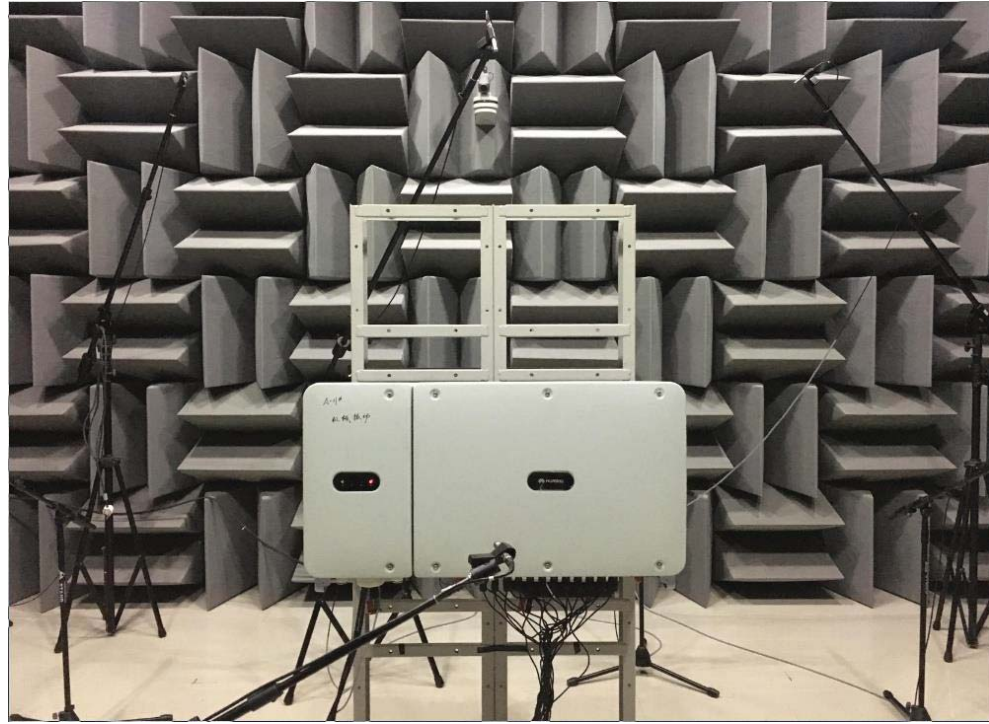


Photo of acoustic test