Dongguan Pendec Acoustics Laboratory
Dongguan Pendec Electronics Telenology Ltd.
Room 206, Leader Plaza Building, No.303, Changqing South Rd., ChangAn Town, Dongguan City, Guangdong Province, China
Tel: 86-0769-8150-1015 Fax: 86-0769-8150-1017 www.pal-acoustics.com

Sound Pressure Level Test Report

Report No. : DH1_26_0321(Ver.01)
Issue Date : 2026-06-26

Category: PV Inverter
Project Name: SE 12KHB-T1-LV-ECO-II

Shenzhen Senergy Technology Co.,Ltd
Block D, BC Bark, No.18, Xiusha Rd., Shatian Kengzi Sub-district, Pingshan Districit, Shenzhen 518112, P.R.China

Report Signer	Acoustics Engineer	Test Engineer
Denis Wang	Michael Hu	Kyrie Chen
Denis_Wang@pendec.com	Michael_Hu@pendec.com	kyrie_chen@pal-labs.com

8 pages, excluding the cover

Table of Content

1. Introduction Page 2

2. General Information Page 2

3. Testing Configuration Page 2

4. Test Equipment Page 3

5. Reference Page 4

6. Notification Page 4

7. Microphone Position Page 5

8. Setup Photo Page 6

9. Testing Result Page 7

10. Spectrum Page 8

1. Introduction

One PV Inverter designated as "SE 12KHB-T1-LV-ECO-II", was received at Dongguan Pendec Electronics Technology Ltd. on 2026-6-24 and tested on 2026-6-24. Determination of the sound pressure level test was conducted in partial conformance with ISO 7779:2018(E) (Acoustics-Measurement of airborne noise emitted by information technology and telecommunications equipment) and ISO 11201:2010(E) (Acoustics-Noise emitted by machinery and equipment-measurement of emission sound pressure levels at a work station and at other specified positions-engineering method in an essentially free field over a reflecting plane).

The test was conducted by Kyrie Chen. Data analysis and report generation were conducted by Kyrie Chen.

2. General Information

Report Version:	Version 01(Initial version)
Applicant :	Shenzhen Senergy Technology Co.,Ltd
Manufacturer / OEM :	Shenzhen Senergy Technology Co.,Ltd
Brand Name :	NA
Product description :	PV Inverter
Project name :	SE 12KHB-T1-LV-ECO-II
Quantity :	1 unit (s)
Test procedure :	ISO 7779:2018(E), ISO 11201:2010(E)
Standard :	ISO 7779:2018(E), ISO 11201:2010(E)

3. Testing Configuration

Environment:	Temperature:	23.0	℃
	Relative Humidity:	60.0	%
	Barometric pressure:	100.7	kPa
	Testing Chamber:	Hemi-Anechoic Chamber #1,Dongguan	
Testing Method:	The sound pressure level is performed in accordance with the procedures specified in clause 8 of ISO 7779: "Acoustics - Measurement of airborne noise emitted by information technology and telecommunication equipment, 2018(E)." The sound pressure level is displayed in decibels (reference:20 μPa)		
Frequency Bandwidth:	The testing frequency bandwidth is 100 Hz~20 KHz in 1/3 Octave bands		
Frequency Weighting:	The testing frequency weighting is A-Weighted		
Measurement Duration:	Each measurement duration is 60 seconds		
Sample Installation:	The testing sample is installed on the fixture located in the geometric center of the hemi-anechoic chamber		
Uncertainty:	Uncertainty = 2.0 dB(A); The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.		

4. Test Equipment

Item	Equipment	Brand	Type	Serial Number	Last Calibration Date	Next Calibration Date	Calibration Source
1	Microphone	G.R.A.S.	Type 46AE	117209	2024/8/5	2026/8/4	GZJLS
2	Microphone	G.R.A.S.	Type 46AE	458694	2024/8/5	2026/8/4	GZJLS
3	Microphone	G.R.A.S.	Type 46AE	117205	2024/8/5	2026/8/4	GZJLS
4	Microphone	G.R.A.S.	Type 46AE	117203	2024/8/5	2026/8/4	GZJLS
5	Microphone	G.R.A.S.	Type 46AE	117201	2024/8/5	2026/8/4	GZJLS
6	Preamplifier	G.R.A.S.	Type 26CA	121980	2024/8/5	2026/8/4	GZJLS
7	Preamplifier	G.R.A.S.	Type 26CA	471166	2024/8/5	2026/8/4	GZJLS
8	Preamplifier	G.R.A.S.	Type 26CA	121976	2024/8/5	2026/8/4	GZJLS
9	Preamplifier	G.R.A.S.	Type 26CA	121974	2024/8/5	2026/8/4	GZJLS
10	Preamplifier	G.R.A.S.	Type 26CA	121972	2024/8/5	2026/8/4	GZJLS
11	Extender Power Module	Head Acoustics	GSS102	049068-072011	N/A	N/A	N/A
12	Connect Module	Head Acoustics	LMF2fe	045216-032010	2024/7/16	2026/7/15	GZJLS
13	6 Channel Module	Head Acoustics	DIC6B	045288-032010	2024/7/16	2026/7/15	GZJLS
14	4 Channel Module	Head Acoustics	DEBU	044824-012010	2024/7/16	2026/7/15	GZJLS

5. Reference

1. ISO 7779: 2018(E) - Acoustics - Measurement of airborne noise emitted by information technology and telecommunications equipment
2. ISO 11201: 2010(E) - Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Engineering method in an essentially free field over a reflecting plane

6. Notification

1. The version 01 is the initial version.
2. The test results are only valid for the specimen tested.
3. This test report should be used in complete form and any statement or result is partial extraction of this report is not valid.
4. The TAF and ilac logo only assures the quality system of Dongguan Pendec Electronics Technology Ltd. is accordance with the requirment of ISO/IEC 17025.
5. All testing data are not included in the accreditation scope of TAF. TAF does not assure whether the reporting data are correct or not. Clients shall not claim product certification, approval, or endorsement by TAF or any agency.

7. Test Setup

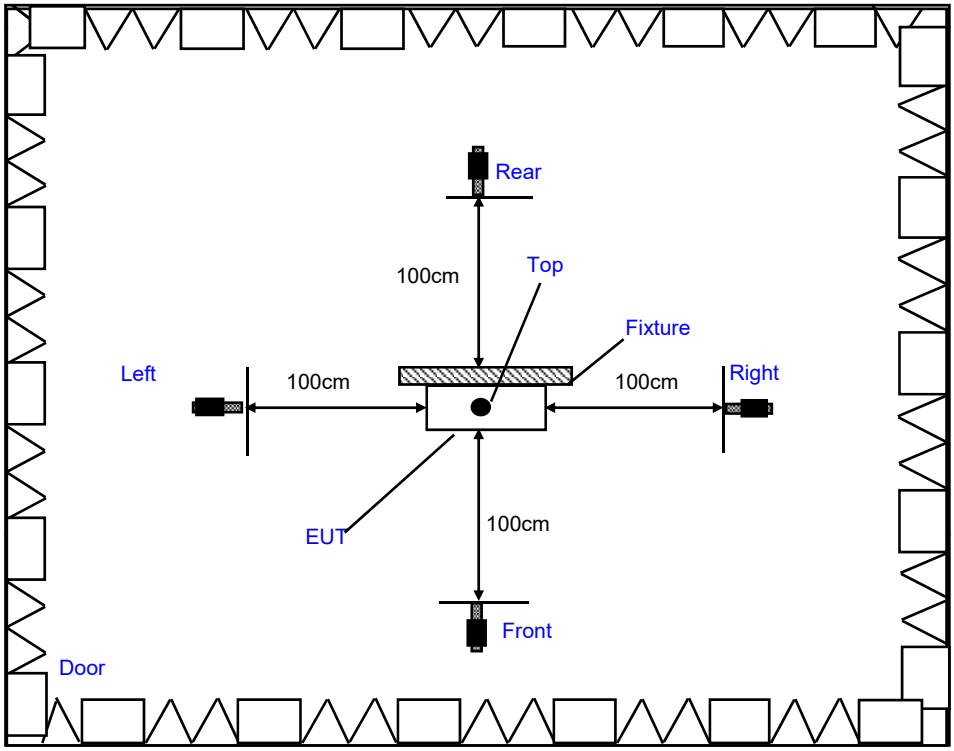

Fig. 1 Location of EUT and microphone bystander position (Top view)

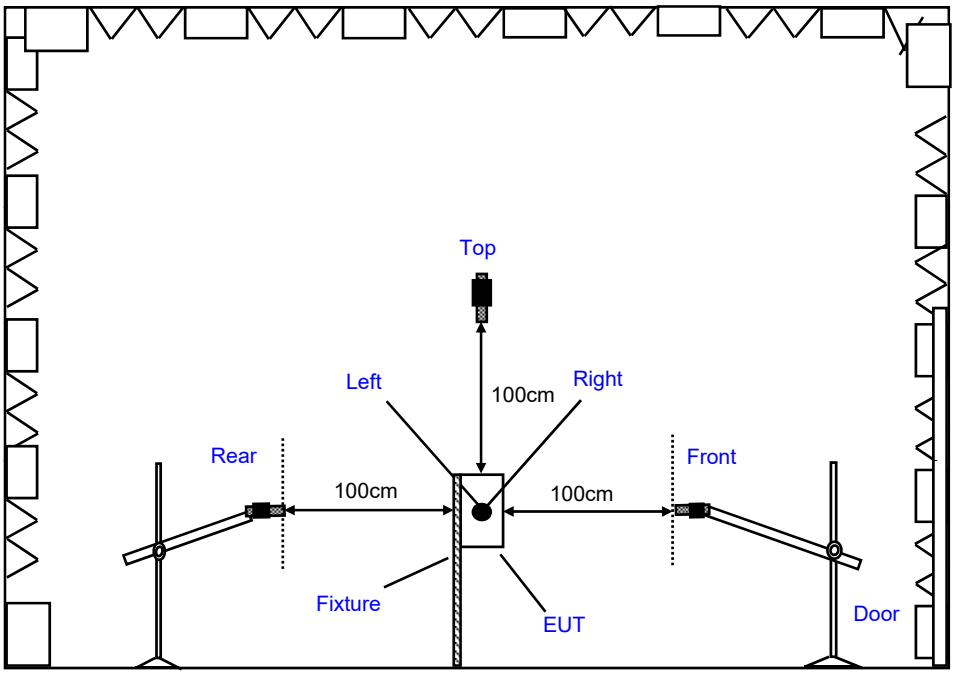

Fig. 2 Location of EUT and microphone bystander position (Side view)

8. Setup Photo

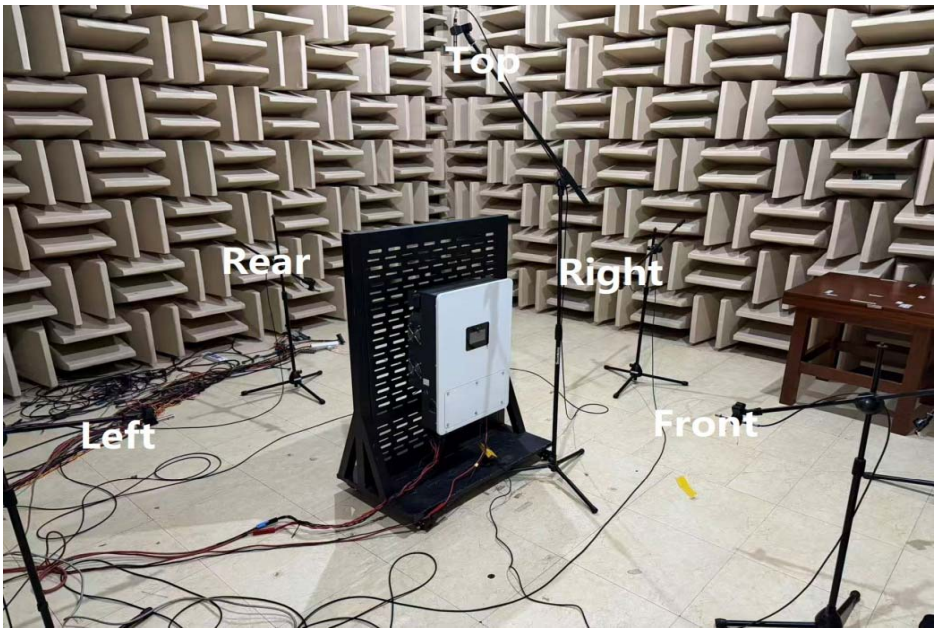

Fig. 3 Setup of EUT (overall view)

Fig. 4 Setup of EUT (close view)

9. Test Result

No.	Mode	Measured Sound Pressure Level dB(A)	Background Noise Correction dB(A)	Corrected Sound Pressure Level dB(A)
		Front	$K_{1A, Front}$	Front
	Background noise	16.3		
1	SE 12KHB-T1-LV-ECO-II_Typical	40.6	0.0	40.6
2	SE 12KHB-T1-LV-ECO-II_Max	44.8	0.0	44.8

Note: If the difference between measured sound pressure levels and background noise(△L) < 6 dB, K_{1A} to be applied is 1.3 dB;
If △L > 15 dB, K1A to be applied is 0 dB ; Else K1A calculated according to Equation K1A=-10lg(1-10-0.1△L)dB for accuracy grade 2 (according to Sec.5.4.2 of ISO 11201:2010(E)).
For some cases, the corrected sound pressure level might be lower than the background noise. It can be assumed that the source emits little or no measurable noise, and that the data reported represent upper bounds to the emission sound pressure level.

10. Spectrum

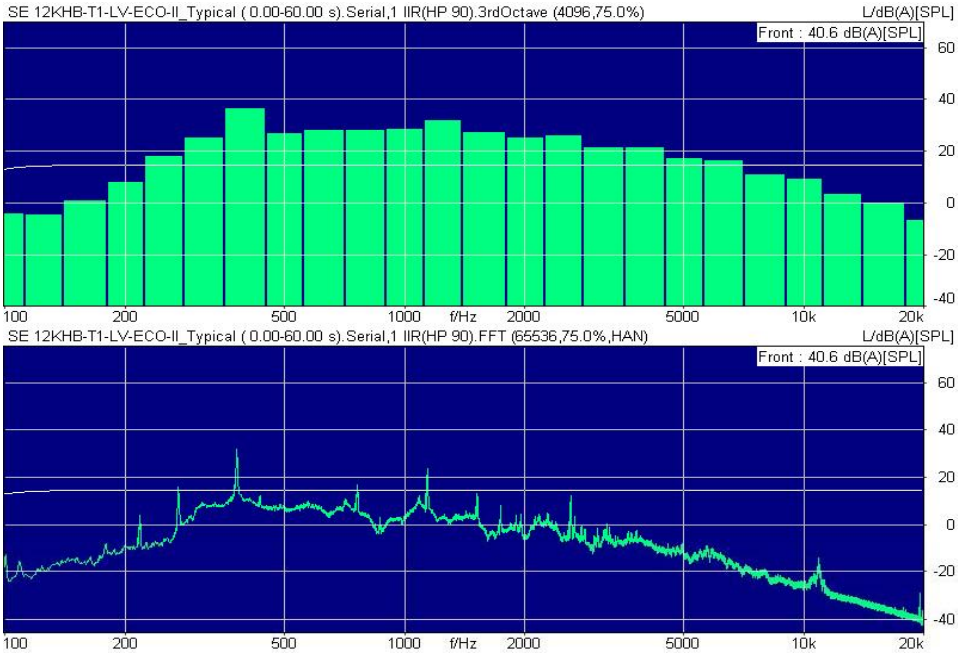

Fig. 5 SE 12KHB-T1-LV-ECO-II_Typical

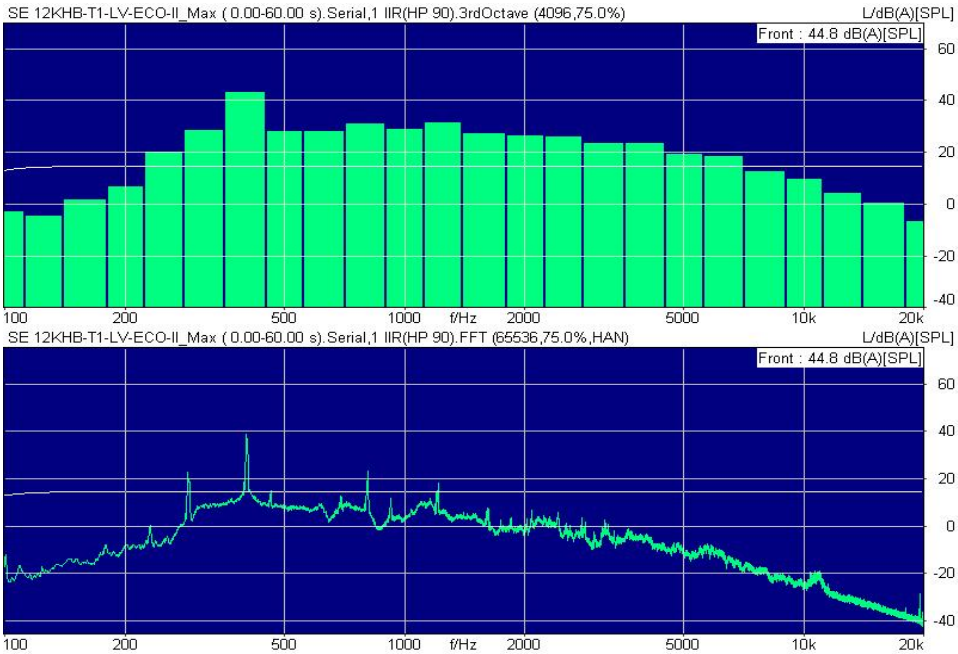

Fig. 6 SE 12KHB-T1-LV-ECO-II_Max

Null Below