



中国认可  
国际互认  
检测  
TESTING  
CNAS L2291



# TEST REPORT

**Product Name : Off-grid inverter**

**Model Number : XN3624-MAX**

Prepared for : INVT Solar Technology (ShenZhen) Co., Ltd.  
Address : 6th Floor, Block A, INVT Guangming Technology Building,  
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Report Number : ENS2510110131E00301R  
Date(s) of Tests : May 15, 2025 to May 20, 2025  
Date of issue : October 15, 2025



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## TEST REPORT DESCRIPTION

|              |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applicant    | : | INVT Solar Technology (ShenZhen) Co., Ltd.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Manufacturer | : | INVT Solar Technology (ShenZhen) Co., Ltd..                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Trademark    | : | INVT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| EUT          | : | Off-grid inverter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Model No.    | : | XN3624-MAX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Rating       | : | AC Output: Rated Power a.c. :3600VA/3600W<br>Rated Voltage a.c. : 230V±5%;<br>Rated Current a.c. : 15.7A<br>Battery: Voltage Range d.c. : 20-30V; Rated Voltage d.c. : 24V<br>AC Input: Rated Power a.c. : 90-280V; Frequency : 50Hz/60Hz;<br>Max AC Bypass Current a.c. : 20A;<br>Max AC Charge Current a.c. : 100A<br>PV Input: Max Power d.c. : 5000W; Max. Open Voltage d.c. : 500V;<br>Max PV input current d.c. : 18A;<br>MPPT Input Voltage Range d.c. : 40-450V;<br>Max Charge Current d.c. : 100A |

**Measurement Procedure Used:**

EN IEC 61000-6-4:2019, IEC 61000-6-4:2018  
EN 61000-3-12:2011, IEC 61000-3-12:2011  
EN IEC 61000-3-11:2019, IEC 61000-3-11:2017  
EN IEC 61000-6-2:2019, IEC 61000-6-2:2016  
(IEC 61000-4-2:2008, IEC 61000-4-3:2006+A1:2007+A2:2010, IEC 61000-4-4:2012,  
IEC 61000-4-5:2014, IEC 61000-4-6:2013, IEC 61000-4-8:2009, IEC 61000-4-11:2004,  
IEC 61000-4-34:2005+A1:2009)

The device described above is tested by EMTEK (SHENZHEN) CO., LTD. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and EMTEK (SHENZHEN) CO., LTD. is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the EN IEC 61000-6-4, EN 61000-3-12, EN IEC 61000-3-11, EN IEC 61000-6-2 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of EMTEK (SHENZHEN) CO., LTD.

Date of Test : May 15, 2025 to May 20, 2025

Prepared by : Yuxiang Yuan/Editor

Reviewer : \_\_\_\_\_  
Kaimin Guo/Supervisor

Approved & Authorized Signer : \_\_\_\_\_  
Lisa Wang/Manager

## Modified Information

| Version | Report No.           | Revision Date | Summary         |
|---------|----------------------|---------------|-----------------|
| Ver.1.0 | ENS2510110131E00301R | /             | Original Report |



## 1. SUMMARY OF TEST RESULT

| EMISSION                                         |                      |                                                    |                      |         |
|--------------------------------------------------|----------------------|----------------------------------------------------|----------------------|---------|
| Description of Test Item                         |                      | Standard                                           | Limits               | Results |
| Conducted Disturbance at Mains Terminals         | AC Mains port        | EN IEC 61000-6-4:2019                              | Table 4              | Pass    |
|                                                  | DC Power port        |                                                    | Table A.1            | N/A     |
| Telecommunication/network port                   |                      | Cited from CISPR 32                                | Table 5              | N/A     |
| Radiated emissions at frequencies up to 1 GHz    |                      | EN IEC 61000-6-4:2019                              | Table 3              | Pass    |
| Radiated emissions at frequencies above 1 GHz    |                      | EN IEC 61000-6-4:2019                              | Table 3              | N/A     |
| Harmonic Current Emissions                       |                      | EN 61000-3-12:2011                                 | Table 2              | Pass    |
| Voltage Fluctuation and Flicker                  |                      | EN IEC 61000-3-11:2019                             | --                   | Pass    |
| IMMUNITY (EN IEC 61000-6-2:2019)                 |                      |                                                    |                      |         |
| Description of Test Item                         |                      | Basic Standard                                     | Performance Criteria | Results |
| Electrostatic Discharge (ESD)                    |                      | IEC 61000-4-2:2008                                 | B                    | Pass    |
| Radio-Frequency, Continuous Radiated Disturbance |                      | IEC 61000-4-3:2006+A1:2007+A2:2010                 | A                    | Pass    |
| EFT/B Immunity                                   | Signal/control ports | IEC61000-4-4:2012                                  | B                    | N/A     |
|                                                  | DC power ports       |                                                    |                      | Pass    |
|                                                  | AC power ports       |                                                    |                      | Pass    |
| Surge Immunity                                   | Signal/control ports | IEC 61000-4-5:2014                                 | B                    | N/A     |
|                                                  | DC power ports       |                                                    |                      | Pass    |
|                                                  | AC power ports       |                                                    |                      | Pass    |
| Conducted RF Immunity                            | Signal/control ports | IEC 61000-4-6:2013                                 | A                    | N/A     |
|                                                  | DC power ports       |                                                    |                      | Pass    |
|                                                  | AC power ports       |                                                    |                      | Pass    |
| Power Frequency Magnetic Field                   |                      | IEC 61000-4-8:2009                                 | A                    | Pass    |
| Voltage Dips, >95% Reduction                     |                      | IEC 61000-4-11:2004<br>IEC 61000-4-34:2005+A1:2009 | B                    | Pass    |
| Voltage Dips, 30% Reduction                      |                      |                                                    | C                    | Pass    |
| Voltage Interruptions                            |                      |                                                    | C                    | Pass    |
| Note: N/A means not applicable.                  |                      |                                                    |                      |         |

## 2. GENERAL INFORMATION

### 2.1 Description of Device (EUT)

|                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EUT                                                                                                                                                                                                                                                                                             | : Off-grid inverter                                                                                                                                                        |
| Model Number                                                                                                                                                                                                                                                                                    | : XN3624-MAX                                                                                                                                                               |
| Sample ID                                                                                                                                                                                                                                                                                       | : ENS2505140144E002/1-1                                                                                                                                                    |
| Test Voltage                                                                                                                                                                                                                                                                                    | : DC 450V, AC 230V/50Hz, DC 24V                                                                                                                                            |
| Applicant                                                                                                                                                                                                                                                                                       | : INVT Solar Technology (ShenZhen) Co., Ltd.                                                                                                                               |
| Address                                                                                                                                                                                                                                                                                         | : 6th Floor, Block A, INVT Guangming Technology Building, Kejie Fourth Road, Shutianpu Community, Matian Guangming District, 518000 Shen zhen, PEOPLE' S REPUBLIC OF CHINA |
| Manufacturer                                                                                                                                                                                                                                                                                    | : INVT Solar Technology (ShenZhen) Co., Ltd.                                                                                                                               |
| Address                                                                                                                                                                                                                                                                                         | : 6th Floor, Block A, INVT Guangming Technology Building, Kejie Fourth Road, Shutianpu Community, Matian Guangming District, 518000 Shen zhen, PEOPLE' S REPUBLIC OF CHINA |
| Factory                                                                                                                                                                                                                                                                                         | : INVT Solar Technology (ShenZhen) Co., Ltd.                                                                                                                               |
| Address                                                                                                                                                                                                                                                                                         | : 6th Floor, Block A, INVT Guangming Technology Building, Kejie Fourth Road, Shutianpu Community, Matian Guangming District, 518000 Shen zhen, PEOPLE' S REPUBLIC OF CHINA |
| Date of Received                                                                                                                                                                                                                                                                                | : May 15, 2025                                                                                                                                                             |
| Date of Test                                                                                                                                                                                                                                                                                    | : May 15, 2025 to May 20, 2025                                                                                                                                             |
| Note: This report is based on ENS2505140144E00201R change of applicant, manufacturer, factory, address, trademark, product name, model and product appearance photos. This change or addition does not affect test results. The original data and records are referred to ENS2505140144E00201R. |                                                                                                                                                                            |

### 2.2 Independent Operation Modes

- A. On
1. PV IN & AC Back UP
  2. AC Charging & AC Back Up
  3. Discharging & AC Back UP

## 2.3 Test Manner

| Test Items                                       | Test Voltage                      | Operation Modes      | Worst case           |
|--------------------------------------------------|-----------------------------------|----------------------|----------------------|
| Conducted disturbance at mains Terminals         | AC 230V/50Hz                      | Mode A.2             | Mode A.2             |
| Radiated Disturbance                             | DC 450V<br>AC 230V/50Hz<br>DC 24V | Mode A               | Mode A.3<br>(DC 24V) |
| Harmonic Current Emissions                       | AC 230V/50Hz                      | Mode A.2             | \                    |
| Voltage Fluctuation and Flicker                  | AC 230V/50Hz                      | Mode A.2             | \                    |
| Electrostatic Discharge                          | DC 450V                           | Mode A               | \                    |
| Continuous RF electromagnetic field disturbances | AC 230V/50Hz<br>DC 24V            | Mode A               | \                    |
| Electrical fast transients/burst                 | DC 450V<br>AC 230V/50Hz           | Mode A.1<br>Mode A.2 | \                    |
| Surges                                           |                                   | Mode A.1<br>Mode A.2 | \                    |
| Continuous induced RF disturbances               |                                   | Mode A.1<br>Mode A.2 | \                    |
| Power frequency magnetic field                   | DC 450V<br>AC 230V/50Hz<br>DC 24V | Mode A               | \                    |
| Voltage dips and interruptions                   | AC 230V/50Hz                      | Mode A.2             | \                    |

## 2.4 Description of Support Device

N/A

## 2.5 Description of Test Facility

Site Description  
EMC Lab.

: **Accredited by CNAS**  
The Certificate Registration Number is L2291.  
The Laboratory has been assessed and proved to be in compliance with CNAS-CL01 (identical to ISO/IEC 17025:2017)

**Accredited by FCC**  
Designation Number: CN1204  
Test Firm Registration Number: 882943

**Accredited by A2LA**  
The Certificate Number is 4321.01.

**Accredited by Industry Canada**  
The Conformity Assessment Body Identifier is CN0008

Name of Firm : EMTEK (SHENZHEN) CO., LTD.  
Site Location : Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China

## 2.6 Measurement Uncertainty

| Test Item                                             | Uncertainty                                                       |
|-------------------------------------------------------|-------------------------------------------------------------------|
| Conducted Emission Uncertainty<br>(Conduction 2#)     | : 3.16dB (9k~150kHz Conduction)<br>2.90dB (150k-30MHz Conduction) |
| Radiated Emission Uncertainty<br>(3m 3# Chamber)      | : 4.28dB (30M~1GHz Polarize: H)<br>4.86dB (30M~1GHz Polarize: V)  |
| Uncertainty for Flicker test                          | : 0.514%                                                          |
| Uncertainty for Harmonic test                         | : 4.04%                                                           |
| Uncertainty for C/S Test                              | : 0.94dB(Using CDN Test)<br>2.37dB(Using EM Clamp Test)           |
| Uncertainty for R/S Test                              | : 1.53dB(80MHz-3000MHz)                                           |
| Uncertainty for test site temperature<br>and humidity | : 0.6℃<br>4%                                                      |

### 3. MEASURING DEVICE AND TEST EQUIPMENT

#### 3.1 For Conducted Emission Measurement

| Item                                | Equipment         | Manufacturer    | Model No.     | Serial No. | Last Cal.    | Cal. Interval |
|-------------------------------------|-------------------|-----------------|---------------|------------|--------------|---------------|
| <input checked="" type="checkbox"/> | EMI Test Receiver | Rohde & Schwarz | ESCI          | 101045     | May 09, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | PULSE LIMITER     | Schwarzbeck     | VTSD 9561 F-B | 00955      | May 09, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | AMN               | Schwarzbeck     | NNLK 8129     | 8129203    | May 09, 2025 | 1 Year        |

#### 3.2 Radiated Emission Measurement (3m)

| Used                                | Equipment         | Manufacturer    | Model No.   | Serial No.   | Last Cal.     | Cal. Interval |
|-------------------------------------|-------------------|-----------------|-------------|--------------|---------------|---------------|
| <input checked="" type="checkbox"/> | EMI Test Receiver | Rohde & Schwarz | ESU 26      | 100154       | May 09, 2025  | 1 Year        |
| <input checked="" type="checkbox"/> | Pre-Amplifier     | Lunar EM        | LNA30M3G-25 | J10100000070 | May 09, 2025  | 1 Year        |
| <input checked="" type="checkbox"/> | Bilog Antenna     | Schwarzbeck     | VULB9163    | 661          | June 02, 2023 | 2 Year        |

#### 3.3 For Harmonic Current / Flicker Measurement

| Used                                | Equipment                      | Manufacturer | Model No.          | Serial No. | Last Cal.    | Cal. Interval |
|-------------------------------------|--------------------------------|--------------|--------------------|------------|--------------|---------------|
| <input checked="" type="checkbox"/> | 45KVA AC Power source          | Teseq        | NSG 1007-45/45KV A | 1305A02873 | May 10, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Signal conditioning Unit       | Teseq        | CCN 1000-3         | 1305A02873 | May 10, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Impedance network              | Teseq        | INA2197/37A        | 1305A02873 | May 10, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Impedance network              | Teseq        | INA 2196/75A       | 1305A02874 | May 10, 2025 | 1 Year        |
| <input type="checkbox"/>            | Proflin 2100 AC Switching Unit | Teseq        | NSG 2200-3         | A22714     | May 10, 2025 | 1 Year        |

#### 3.4 For Electrostatic Discharge Immunity Test

| Item                                | Equipment  | Manufacturer | Model No. | Serial No. | Last Cal.      | Cal. Interval |
|-------------------------------------|------------|--------------|-----------|------------|----------------|---------------|
| <input checked="" type="checkbox"/> | ESD Tester | TESEQ        | NSG 438   | 1881       | April 27, 2025 | 1 Year        |

### 3.5 For RF Strength Susceptibility Test

| Item                                | Equipment                       | Manufacturer | Model No.        | Serial No.    | Last Cal.     | Cal. Interval |
|-------------------------------------|---------------------------------|--------------|------------------|---------------|---------------|---------------|
| <input checked="" type="checkbox"/> | Power Amplifier                 | MILMEGA      | AS0102-55        | 1018770       | May 09, 2025  | 1 Year        |
| <input checked="" type="checkbox"/> | RF Power Meter. Dual Channel    | BOONTON      | 4232A            | 10539         | May 09, 2025  | 1 Year        |
| <input checked="" type="checkbox"/> | Log.-Per. Antenna               | SCHWARZBECK  | STLP 9129-7/16   | 3050          | N/A           | N/A           |
| <input checked="" type="checkbox"/> | Signal Generator                | Agilent      | N5181A           | MY50145187    | May 09, 2025  | 1 Year        |
| <input checked="" type="checkbox"/> | 50ohm Diode Power Sensor        | BOONTON      | 51011EMC         | 36164         | May 09, 2025  | 1 Year        |
| <input checked="" type="checkbox"/> | Field Strength Meter            | DARE         | RSS1006A         | 10I00037SNO22 | May 13, 2025  | 1 Year        |
| <input checked="" type="checkbox"/> | Multi-function interface system | DARE         | CTR1009B         | 12I00250SNO72 | N/A           | N/A           |
| <input checked="" type="checkbox"/> | Automatic switch group          | DARE         | RSW1004A         | N/A           | N/A           | N/A           |
| <input checked="" type="checkbox"/> | Power Amplifier                 | MILMEGA      | AS1860-50        | 1059346       | May 09, 2025  | 1 Year        |
| <input checked="" type="checkbox"/> | Power Amplifier                 | Vectawave    | VBA 1000-600C    | 133627        | Oct. 18, 2024 | 1 Year        |
| <input checked="" type="checkbox"/> | Directional Coupler             | BONN         | BDC 0810-50/1500 | 2229689       | Oct. 18, 2024 | 1 Year        |

### 3.6 For Electrical Fast Transient / Burst Immunity Test

| Item                                | Equipment       | Manufacturer | Model No. | Serial No.  | Last Cal.     | Cal. Interval |
|-------------------------------------|-----------------|--------------|-----------|-------------|---------------|---------------|
| <input checked="" type="checkbox"/> | Burst Tester    | Partner      | IMU-MGS   | 109938-1635 | Oct. 18, 2024 | 1 Year        |
| <input checked="" type="checkbox"/> | Coupling Clamp  | HAEFELY      | IP-4A     | 147147      | May 09, 2025  | 1 Year        |
| <input checked="" type="checkbox"/> | Three phase CDN | Teseq        | CDN 163   | 202         | May 09, 2025  | 1 Year        |

### 3.7 For Surge Immunity Test

| Item                                | Equipment           | Manufacturer | Model No.   | Serial No. | Last Cal.    | Cal. Interval |
|-------------------------------------|---------------------|--------------|-------------|------------|--------------|---------------|
| <input checked="" type="checkbox"/> | Controller          | HAEFELY      | Psurge 8000 | 174031     | May 10, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Impulse Module      | HAEFELY      | PIM 100     | 174124     | May 10, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Coupling Decoupling | HAEFELY      | PCD 130     | 172181     | May 10, 2025 | 1 Year        |
| <input type="checkbox"/>            | Coupling Module     | HAEFELY      | PCD122      | 174354     | May 10, 2025 | 1 Year        |
| <input type="checkbox"/>            | Impulse Module      | HAEFELY      | PIM 120     | 174435     | May 10, 2025 | 1 Year        |
| <input type="checkbox"/>            | Coupling Module     | HAEFELY      | PCD 126A    | 174387     | May 10, 2025 | 1 Year        |
| <input type="checkbox"/>            | Impulse Module      | HAEFELY      | PIM 110     | 174391     | May 10, 2025 | 1 Year        |
| <input type="checkbox"/>            | Impulse Module      | HAEFELY      | PIM 150     | 178707     | May 10, 2025 | 1 Year        |
| <input type="checkbox"/>            | Impulse Module      | PMI          | PCDN8       | 190422     | May 10, 2025 | 1 Year        |

### 3.8 For Injected Current Susceptibility Test

| Item                                | Equipment                 | Manufacturer | Model No.         | Serial No.   | Last Cal.    | Cal. Interval |
|-------------------------------------|---------------------------|--------------|-------------------|--------------|--------------|---------------|
| <input checked="" type="checkbox"/> | Continuous Wave Simulator | EMTEST       | CWS500C           | 0900-12      | May 11, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Three phase CDN           | TESEQ        | CDN M532S         | 33799        | May 11, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Attenuator                | EMTEST       | 100W 6dB DC-3G    | /            | May 11, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Signal Generator          | R&S          | SMB100A           | 103041       | May 09, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | EM Injection Clamp        | EMTEST       | F-2031-23MM       | 368          | May 09, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Power meter               | AGILENT      | E4418B            | MY45102886   | May 11, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Directional coupler       | SKET         | DC_0110000 M-100W | SK2018080301 | May 11, 2025 | 1 Year        |

### 3.9 For Magnetic Field Immunity Test

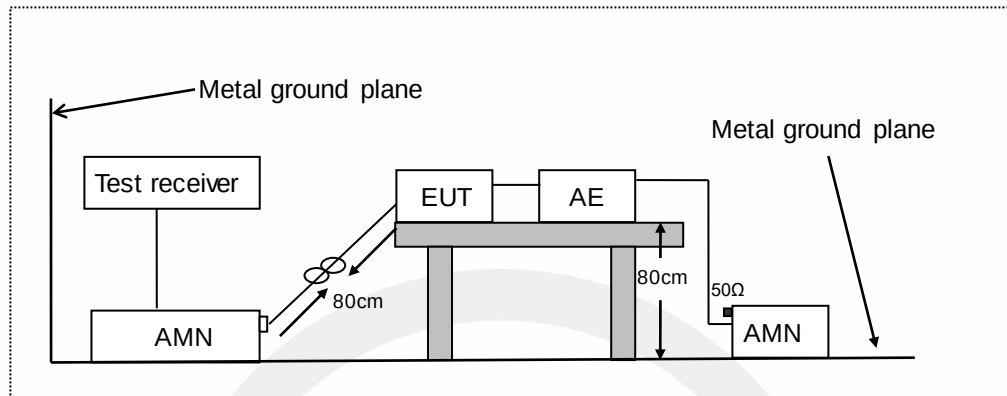
| Item                                | Equipment             | Manufacturer | Model No. | Serial No. | Last Cal.    | Cal. Interval |
|-------------------------------------|-----------------------|--------------|-----------|------------|--------------|---------------|
| <input checked="" type="checkbox"/> | Magnetic Field Tester | HAEFELY      | MAG100    | 250040.1   | May 10, 2025 | 1 Year        |

### 3.10 For Voltage Dips and Interruptions Test

| Used                                | Equipment                      | Manufacturer | Model No.         | Serial No. | Last Cal.    | Cal. Interval |
|-------------------------------------|--------------------------------|--------------|-------------------|------------|--------------|---------------|
| <input checked="" type="checkbox"/> | 45KVA AC Power source          | Teseq        | NSG 1007-45/45KVA | 1305A02873 | May 10, 2025 | 1 Year        |
| <input type="checkbox"/>            | Signal conditioning Unit       | Teseq        | CCN 1000-3        | 1305A02873 | May 10, 2025 | 1 Year        |
| <input type="checkbox"/>            | Impedance network              | Teseq        | INA2197/37A       | 1305A02873 | May 10, 2025 | 1 Year        |
| <input type="checkbox"/>            | Impedance network              | Teseq        | INA 2196/75A      | 1305A02874 | May 10, 2025 | 1 Year        |
| <input checked="" type="checkbox"/> | Proflin 2100 AC Switching Unit | Teseq        | NSG 2200-3        | A22714     | May 10, 2025 | 1 Year        |

## 4. CONDUCTED EMISSION MEASUREMENT

### 4.1 Block Diagram of Test Setup



LISN: Artificial Mains Network  
AE: Associated equipment  
EUT: Equipment under test

### 4.2 Measuring Standard

EN IEC 61000-6-4: 2019

### 4.3 Conducted Emission Limits

☒ AC Mains port:

| Frequency (MHz) | Limit (dB $\mu$ V) |               |
|-----------------|--------------------|---------------|
|                 | Quasi-peak Level   | Average Level |
| 0.15 ~ 0.50     | 79.0               | 66.0          |
| 0.50 ~ 30.00    | 73.0               | 60.0          |

NOTE 1-The lower limit shall apply at the transition frequencies.

☐ DC Power port:

| Frequency (MHz) | Limit (dB $\mu$ V) |               |
|-----------------|--------------------|---------------|
|                 | Quasi-peak Level   | Average Level |
| 0.15 ~ 0.50     | 89.0               | 76.0          |
| 0.50 ~ 30.00    | 83.0               | 70.0          |

NOTE 1-The lower limit shall apply at the transition frequencies.

#### 4.4 Test Procedure

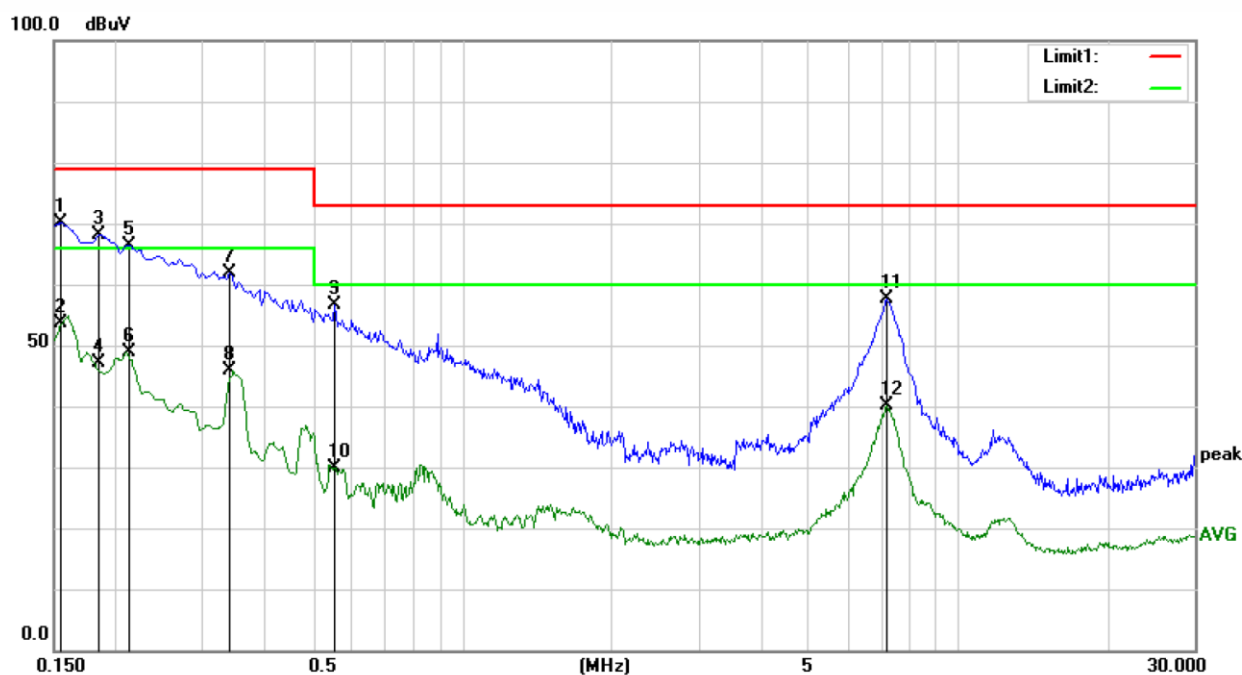
The EUT is put on the plane 0.8m high above the ground by insulating support and connected to the AC/DC mains through Line Impedance Stability Network (L.I.S.N). This provided a 50ohm coupling impedance for the tested equipment. Both sides of AC/DC line are investigated to find out the maximum conducted emission according to the EN 61000-6-4 regulations during conducted emission measurement. The bandwidth of the field strength meter (R&S Test Receiver ESCS30) is set at 9kHz in 150kHz~30MHz and 200Hz in 9kHz~150kHz. The frequency range from 150kHz to 30MHz is investigated.

#### 4.5 Measuring Results

**PASS.**

Please see the following pages.

|                      |   |            |
|----------------------|---|------------|
| Temperature          | : | 25.8°C     |
| Humidity             | : | 52%        |
| Atmospheric Pressure | : | 101kpa     |
| Test Engineer        | : | Jinren Tan |
| Test Date            | : | 2025-05-15 |



Site Conduction 2#

Phase: **L1**

Temperature: 25.8

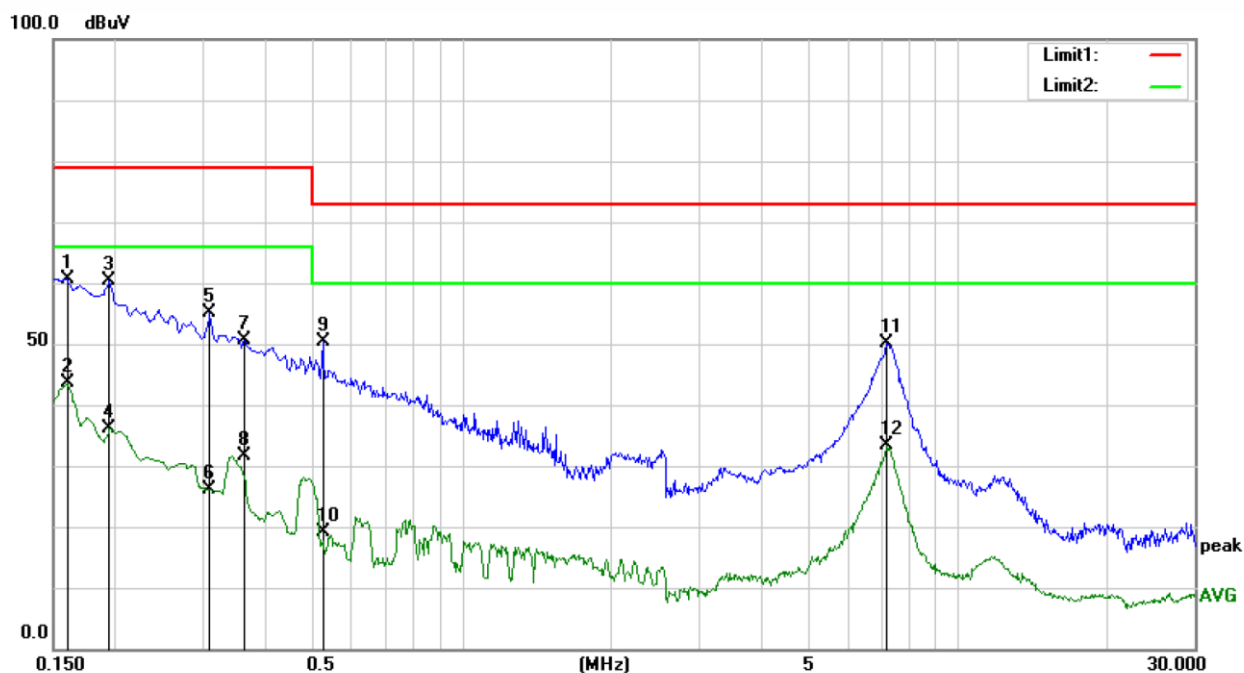
Limit: (CE)EN61000-6-4 QP  
Mode: AC Charging&AC Back UP

Power: AC 230V/50Hz

Humidity: 52 %

Note:

| No. | Mk. | Freq.  | Reading | Correct | Measure- | Limit | Over   |          |         |
|-----|-----|--------|---------|---------|----------|-------|--------|----------|---------|
|     |     | MHz    | Level   | Factor  | ment     |       |        | Detector | Comment |
|     |     |        | dBuV    | dB      | dBuV     | dBuV  | dB     |          |         |
| 1   | *   | 0.1547 | 49.60   | 20.51   | 70.11    | 79.00 | -8.89  | QP       |         |
| 2   |     | 0.1547 | 33.05   | 20.51   | 53.56    | 66.00 | -12.44 | AVG      |         |
| 3   |     | 0.1844 | 47.69   | 20.47   | 68.16    | 79.00 | -10.84 | QP       |         |
| 4   |     | 0.1844 | 26.67   | 20.47   | 47.14    | 66.00 | -18.86 | AVG      |         |
| 5   |     | 0.2127 | 45.96   | 20.45   | 66.41    | 79.00 | -12.59 | QP       |         |
| 6   |     | 0.2127 | 28.42   | 20.45   | 48.87    | 66.00 | -17.13 | AVG      |         |
| 7   |     | 0.3391 | 41.27   | 20.50   | 61.77    | 79.00 | -17.23 | QP       |         |
| 8   |     | 0.3391 | 25.27   | 20.50   | 45.77    | 66.00 | -20.23 | AVG      |         |
| 9   |     | 0.5522 | 36.08   | 20.51   | 56.59    | 73.00 | -16.41 | QP       |         |
| 10  |     | 0.5522 | 9.45    | 20.51   | 29.96    | 60.00 | -30.04 | AVG      |         |
| 11  |     | 7.1753 | 37.00   | 20.52   | 57.52    | 73.00 | -15.48 | QP       |         |
| 12  |     | 7.1753 | 19.54   | 20.52   | 40.06    | 60.00 | -19.94 | AVG      |         |



Site Conduction 2#

Phase: **N**

Temperature: 25.8

Limit: (CE)EN61000-6-4\_QP

Power: AC 230V/50Hz

Humidity: 52 %

Mode: AC Charging&amp;AC Back UP

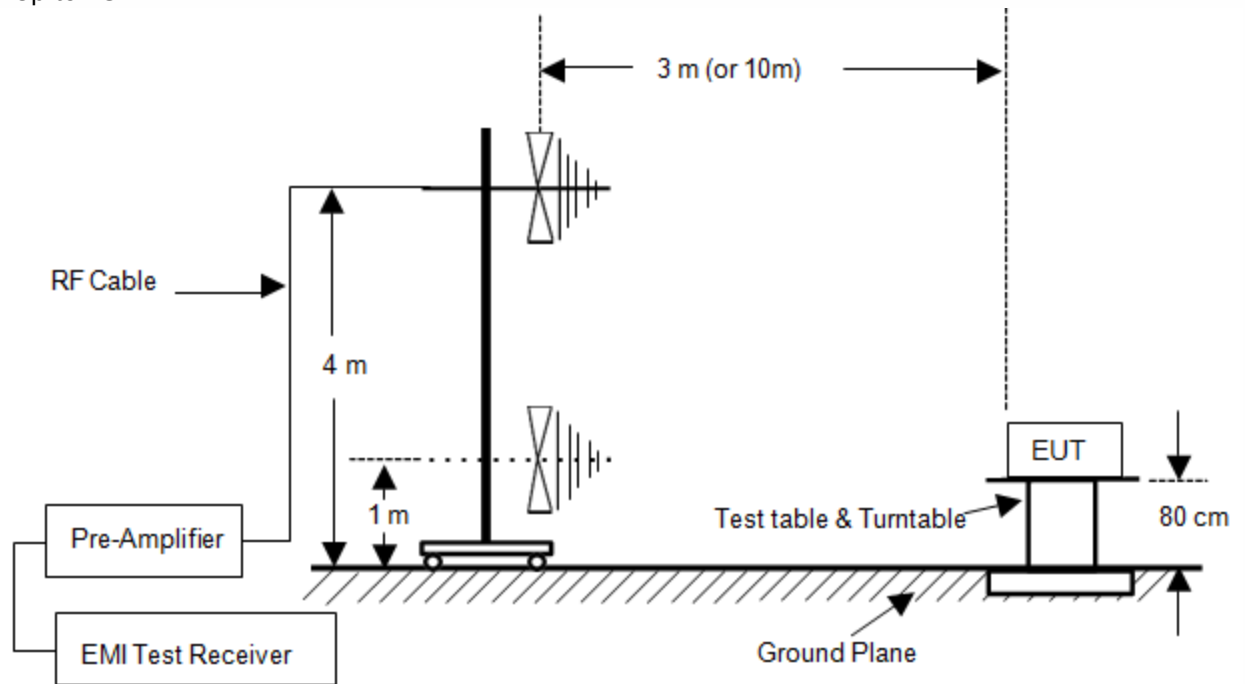
Note:

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1   | *   | 0.1597       | 50.10                    | 10.50                   | 60.60                    | 79.00         | -18.40     | QP       |         |
| 2   |     | 0.1597       | 33.15                    | 10.50                   | 43.65                    | 66.00         | -22.35     | AVG      |         |
| 3   |     | 0.1943       | 49.92                    | 10.45                   | 60.37                    | 79.00         | -18.63     | QP       |         |
| 4   |     | 0.1943       | 25.66                    | 10.45                   | 36.11                    | 66.00         | -29.89     | AVG      |         |
| 5   |     | 0.3100       | 44.54                    | 10.50                   | 55.04                    | 79.00         | -23.96     | QP       |         |
| 6   |     | 0.3100       | 15.71                    | 10.50                   | 26.21                    | 66.00         | -39.79     | AVG      |         |
| 7   |     | 0.3633       | 40.13                    | 10.50                   | 50.63                    | 79.00         | -28.37     | QP       |         |
| 8   |     | 0.3633       | 21.07                    | 10.50                   | 31.57                    | 66.00         | -34.43     | AVG      |         |
| 9   |     | 0.5237       | 39.90                    | 10.52                   | 50.42                    | 73.00         | -22.58     | QP       |         |
| 10  |     | 0.5237       | 8.65                     | 10.52                   | 19.17                    | 60.00         | -40.83     | AVG      |         |
| 11  |     | 7.1753       | 39.70                    | 10.52                   | 50.22                    | 73.00         | -22.78     | QP       |         |
| 12  |     | 7.1753       | 22.82                    | 10.52                   | 33.34                    | 60.00         | -26.66     | AVG      |         |

## 5. RADIATED EMISSION MEASUREMENT

### 5.1 Block Diagram of Test Setup

Up to 1GHz:



### 5.2 Measuring Standard

EN IEC 61000-6-4: 2019

### 5.3 Radiated Emission Limits

| FREQUENCY<br>(MHz) | DISTANCE<br>(Meters) | FIELD STRENGTHS LIMIT<br>(dB $\mu$ V/m) |
|--------------------|----------------------|-----------------------------------------|
| 30 ~ 230           | 3                    | 50                                      |
| 230 ~ 1000         | 3                    | 57                                      |

Note: (1) The smaller limit shall apply at the combination point between two frequency bands.  
(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.

## 5.4 Test Procedure

The EUT is placed on a turntable which is 0.8 meter high above the ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 10 meters away from the receiving antenna that is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Bilog antenna (calibrated by Dipole Antenna) is used as a receiving antenna. Both horizontal and vertical polarization of the antenna is set on test.

The bandwidth of the Receiver is set at 120kHz.

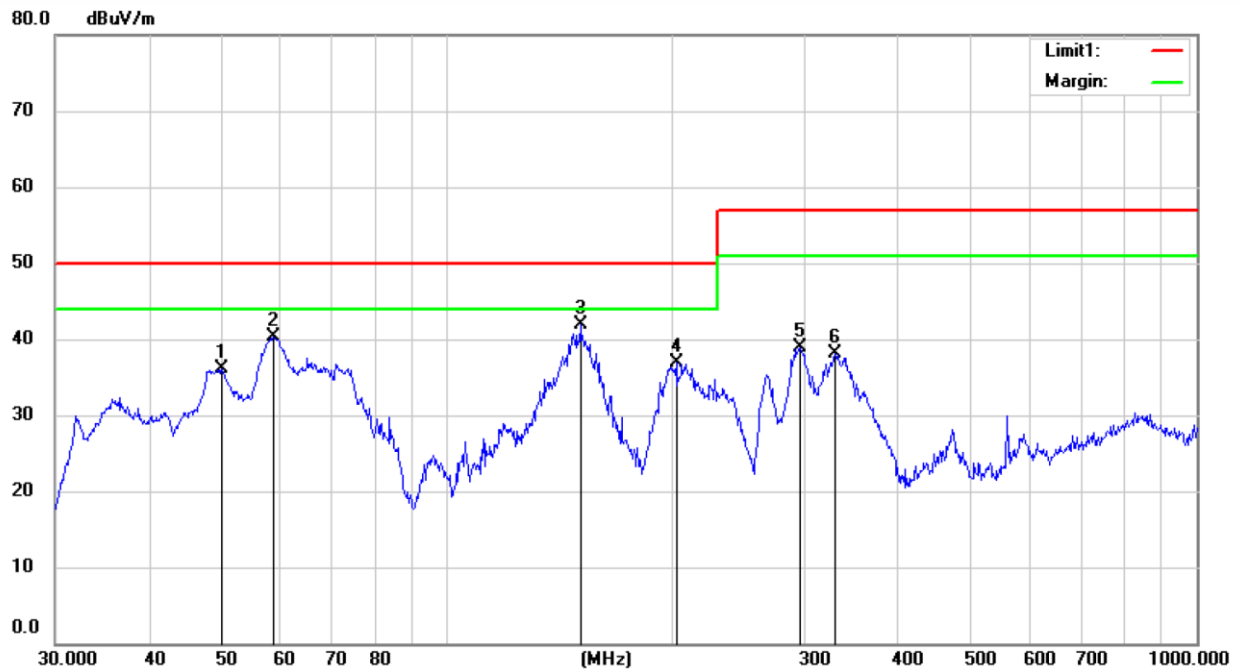
## 5.5 Measuring Results

**PASS.**

The frequency range from 30MHz to 1000MHz is investigated.

All the modes were tested and the data of the worst modes are attached the following pages.

|                      |   |            |
|----------------------|---|------------|
| Temperature          | : | 24.9°C     |
| Humidity             | : | 58%        |
| Atmospheric Pressure | : | 101kpa     |
| Test Engineer        | : | Huan Yang  |
| Test Date            | : | 2025-05-15 |



Site 3m Chamber #3

Polarization: **Horizontal**

Temperature: 24.9 C

Limit: (RE)EN61000-6-4

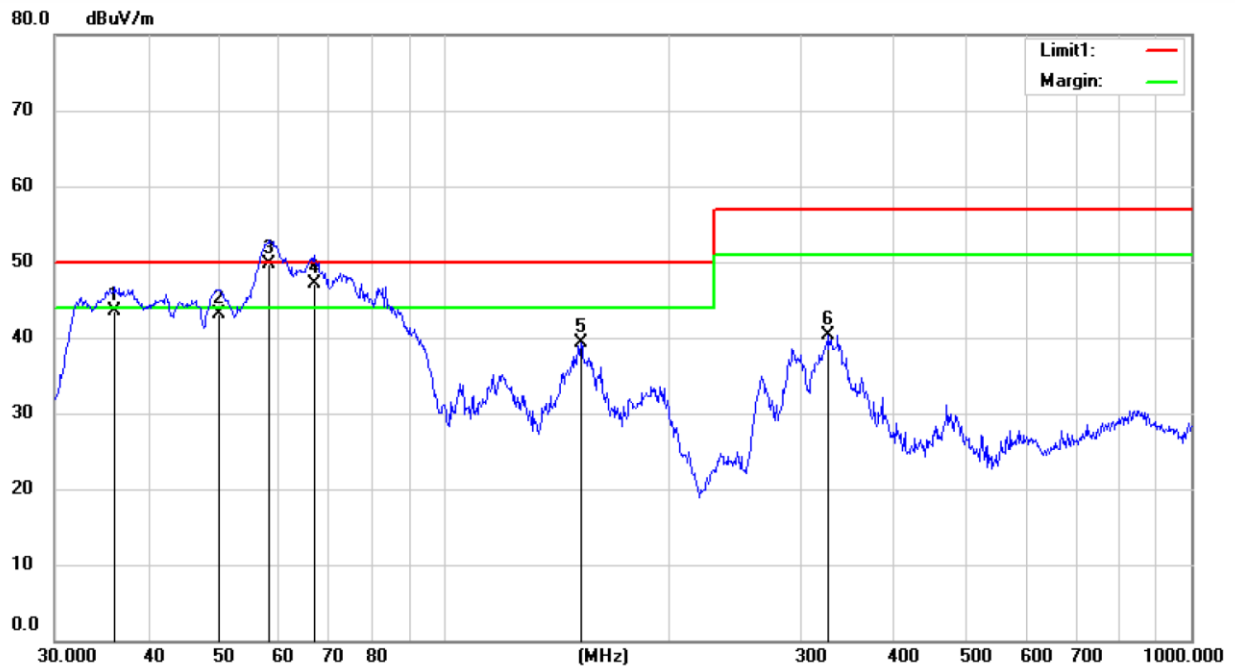
Power: DC 24V

Humidity: 58 %

Mode: Discharging & AC Back UP

Note:

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|-------------------------|---------------------------|---------|
| 1   |     | 50.0566      | 50.21                    | -14.02                  | 36.19                      | 50.00           | -13.81     | QP                      |                           |         |
| 2   |     | 58.6126      | 54.81                    | -14.56                  | 40.25                      | 50.00           | -9.75      | QP                      |                           |         |
| 3   | *   | 150.5378     | 59.03                    | -17.16                  | 41.87                      | 50.00           | -8.13      | QP                      |                           |         |
| 4   |     | 202.1005     | 52.50                    | -15.62                  | 36.88                      | 50.00           | -13.12     | QP                      |                           |         |
| 5   |     | 295.1470     | 50.48                    | -11.59                  | 38.89                      | 57.00           | -18.11     | QP                      |                           |         |
| 6   |     | 329.0390     | 48.91                    | -10.77                  | 38.14                      | 57.00           | -18.86     | QP                      |                           |         |



Site 3m Chamber #3

Polarization: **Vertical**

Temperature: 24.9 C

Limit: (RE)EN61000-6-4

Power: DC 24V

Humidity: 58 %

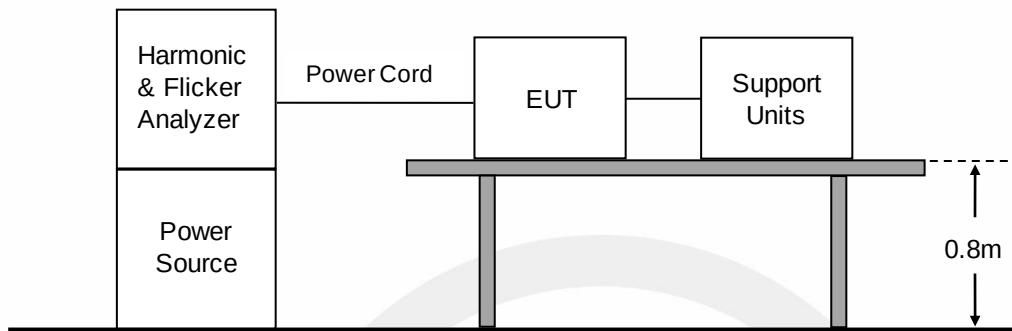
Mode: Discharging & AC Back UP

Note:

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Detector | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|----------|-------------------------|---------------------------|---------|
| 1   |     | 36.1272      | 58.91                    | -15.41                  | 43.50                      | 50.00           | -6.50      | QP       |                         |                           |         |
| 2   |     | 49.7068      | 57.29                    | -14.09                  | 43.20                      | 50.00           | -6.80      | QP       |                         |                           |         |
| 3   | *   | 58.2030      | 64.22                    | -14.52                  | 49.70                      | 50.00           | -0.30      | QP       |                         |                           |         |
| 4   | !   | 66.7325      | 62.73                    | -15.53                  | 47.20                      | 50.00           | -2.80      | QP       |                         |                           |         |
| 5   |     | 152.1297     | 56.41                    | -17.15                  | 39.26                      | 50.00           | -10.74     | QP       |                         |                           |         |
| 6   |     | 326.7395     | 51.27                    | -10.91                  | 40.36                      | 57.00           | -16.64     | QP       |                         |                           |         |

## 6. HARMONIC CURRENT EMISSION MEASUREMENT

### 6.1 Block Diagram of Test Setup



### 6.2 Standard Limits

EN 61000-3-12

Harmonic current emissions evaluate the potential for the EUT to cause distortion on the AC power lines. It is applicable to electrical and electronic equipment having an input current  $>16\text{ A}$  and  $\leq 75\text{ A}$  per phase, and intended to be connected to public low-voltage distribution systems

**Table 2 – Current emission limits for equipment other than balanced three-phase equipment**

| Minimum $R_{sce}$ | Admissible individual harmonic current $I_h/I_{ref}$ <sup>a</sup><br>% |       |       |       |          |          | Admissible harmonic parameters<br>% |                |
|-------------------|------------------------------------------------------------------------|-------|-------|-------|----------|----------|-------------------------------------|----------------|
|                   | $I_3$                                                                  | $I_5$ | $I_7$ | $I_9$ | $I_{11}$ | $I_{13}$ | $THC/I_{ref}$                       | $PWHC/I_{ref}$ |
| 33                | 21,6                                                                   | 10,7  | 7,2   | 3,8   | 3,1      | 2        | 23                                  | 23             |
| 66                | 24                                                                     | 13    | 8     | 5     | 4        | 3        | 26                                  | 26             |
| 120               | 27                                                                     | 15    | 10    | 6     | 5        | 4        | 30                                  | 30             |
| 250               | 35                                                                     | 20    | 13    | 9     | 8        | 6        | 40                                  | 40             |
| $\geq 350$        | 41                                                                     | 24    | 15    | 12    | 10       | 8        | 47                                  | 47             |

The relative values of even harmonics up to order 12 shall not exceed  $16/h\%$ . Even harmonics above order 12 are taken into account in  $THC$  and  $PWHC$  in the same way as odd order harmonics.

Linear interpolation between successive  $R_{sce}$  values is permitted.

<sup>a</sup>  $I_{ref}$  = reference current;  $I_h$  = harmonic current component.

### 6.3 Test Results

**PASS.**

Please see the attached pages.

## Harmonics – Per EN/IEC61000-3-12 (Run time)

EUT: Off-grid inverter  
Test category: Table:2, Rsce=33, Inter-Harm,  
Test date: 2025/5/18 Start time: 9:57:30 End time: 10:00:12  
Test duration (min): 2.5 Data file name: CTSMXH\_H-000015.cts\_data  
Comment: AC Charging & AC Back UP  
Customer: INVT Solar Technology (ShenZhen) Co., Ltd.

Tested by: LIMING SUI

Test Margin: 100

Start time: 9:57:30

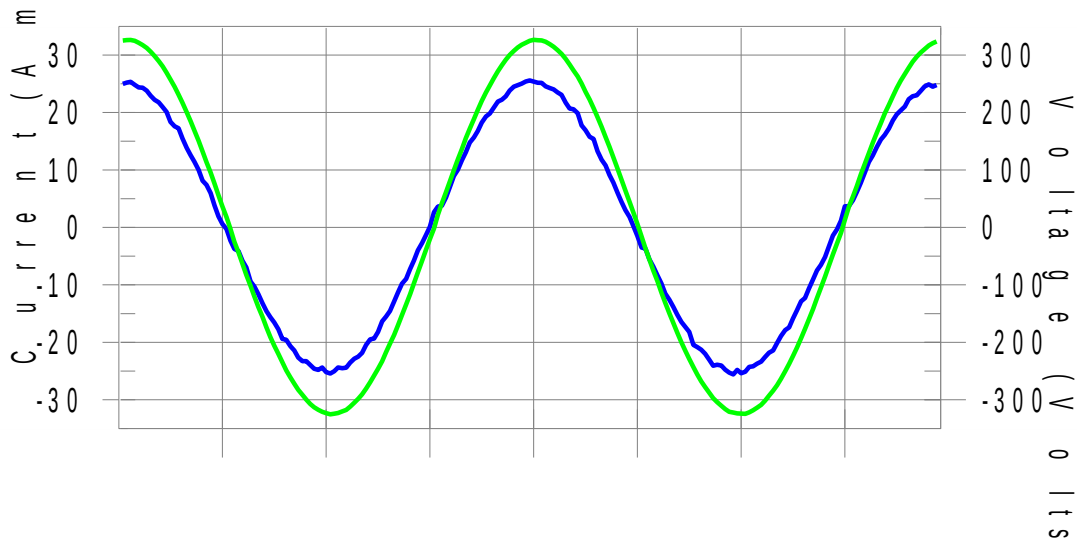
End time: 10:00:12

Data file name: CTSMXH\_H-000015.cts\_data

Test Result: Pass

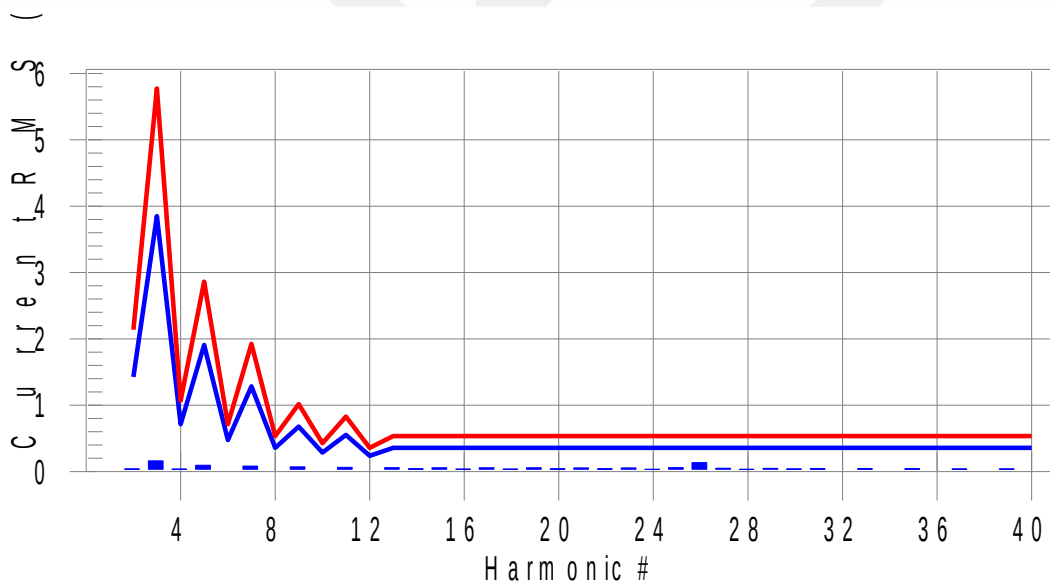
Source qualification: Normal

### Current & voltage waveforms



### Harmonics and Class 2 limit line

### European Limits



**Test result: Pass Worst harmonics H13-11.6% of 150% limit, H13-16.2% of 100% limit.**

## Current Test Result Summary (Run time)

EUT: Off-grid inverter  
Test category: Table:2, Rsce=33, Inter-Harm,  
Test date: 2025/5/18 Start time: 9:57:30 End time: 10:00:12  
Test duration (min): 2.5 Data file name: CTSMXH\_H-000015.cts\_data  
Comment: AC Charging & AC Back UP  
Customer: INVT Solar Technology (ShenZhen) Co., Ltd.

Tested by: LIMING SUI

Test Result: Pass Measured Iref: 17.823(Amps) Source: Normal  
THC/Iref (%): 0.0 Limit (%): 23.0 PWHC/Iref (%): 0.0 PWHC Limit (%): 23.0

### Highest parameter values during test:

V\_RMS (Volts): 230.23  
I\_Peak (Amps): 26.847  
I\_Fund (Amps): 17.819(avg)  
Power (Watts): 4169  
Frequency (Hz): 50.00  
I\_RMS (Amps): 18.017  
Crest Factor: 1.507  
Power Factor: 0.998

| Harm# | Harms(avg) | 100%Limit | %of Limit | Harms(max) | 150%Limit | %of Limit | Status |
|-------|------------|-----------|-----------|------------|-----------|-----------|--------|
| 2     | 0.037      | 1.426     | 2.6       | 0.046      | 2.139     | 2.2       | Pass   |
| 3     | 0.160      | 3.850     | 4.2       | 0.171      | 5.775     | 3.0       | Pass   |
| 4     | 0.036      | 0.713     | 5.0       | 0.040      | 1.069     | 3.8       | Pass   |
| 5     | 0.095      | 1.907     | 5.0       | 0.100      | 2.861     | 3.5       | Pass   |
| 6     | 0.023      | 0.475     | 4.8       | 0.026      | 0.713     | 3.7       | Pass   |
| 7     | 0.083      | 1.283     | 6.5       | 0.091      | 1.925     | 4.7       | Pass   |
| 8     | 0.027      | 0.356     | 7.6       | 0.030      | 0.535     | 5.6       | Pass   |
| 9     | 0.070      | 0.677     | 10.4      | 0.075      | 1.016     | 7.4       | Pass   |
| 10    | 0.031      | 0.285     | 10.7      | 0.042      | 0.428     | 9.8       | Pass   |
| 11    | 0.064      | 0.553     | 11.5      | 0.071      | 0.829     | 8.6       | Pass   |
| 12    | 0.033      | 0.238     | 14.0      | 0.038      | 0.356     | 10.7      | Pass   |
| 13    | 0.058      | 0.356     | 16.2      | 0.062      | 0.535     | 11.6      | Pass   |
| 14    | 0.040      | N/A       | N/A       | 0.044      | N/A       | N/A       | N/A    |
| 15    | 0.056      | N/A       | N/A       | 0.061      | N/A       | N/A       | N/A    |
| 16    | 0.035      | N/A       | N/A       | 0.039      | N/A       | N/A       | N/A    |
| 17    | 0.057      | N/A       | N/A       | 0.061      | N/A       | N/A       | N/A    |
| 18    | 0.036      | N/A       | N/A       | 0.043      | N/A       | N/A       | N/A    |
| 19    | 0.057      | N/A       | N/A       | 0.063      | N/A       | N/A       | N/A    |
| 20    | 0.040      | N/A       | N/A       | 0.050      | N/A       | N/A       | N/A    |
| 21    | 0.054      | N/A       | N/A       | 0.063      | N/A       | N/A       | N/A    |
| 22    | 0.041      | N/A       | N/A       | 0.046      | N/A       | N/A       | N/A    |
| 23    | 0.054      | N/A       | N/A       | 0.059      | N/A       | N/A       | N/A    |
| 24    | 0.034      | N/A       | N/A       | 0.038      | N/A       | N/A       | N/A    |
| 25    | 0.058      | N/A       | N/A       | 0.066      | N/A       | N/A       | N/A    |
| 26    | 0.135      | N/A       | N/A       | 0.148      | N/A       | N/A       | N/A    |
| 27    | 0.049      | N/A       | N/A       | 0.055      | N/A       | N/A       | N/A    |
| 28    | 0.034      | N/A       | N/A       | 0.037      | N/A       | N/A       | N/A    |
| 29    | 0.047      | N/A       | N/A       | 0.052      | N/A       | N/A       | N/A    |
| 30    | 0.037      | N/A       | N/A       | 0.041      | N/A       | N/A       | N/A    |
| 31    | 0.043      | N/A       | N/A       | 0.053      | N/A       | N/A       | N/A    |
| 32    | 0.030      | N/A       | N/A       | 0.034      | N/A       | N/A       | N/A    |
| 33    | 0.043      | N/A       | N/A       | 0.048      | N/A       | N/A       | N/A    |
| 34    | 0.028      | N/A       | N/A       | 0.033      | N/A       | N/A       | N/A    |
| 35    | 0.042      | N/A       | N/A       | 0.047      | N/A       | N/A       | N/A    |
| 36    | 0.027      | N/A       | N/A       | 0.031      | N/A       | N/A       | N/A    |
| 37    | 0.039      | N/A       | N/A       | 0.045      | N/A       | N/A       | N/A    |
| 38    | 0.026      | N/A       | N/A       | 0.029      | N/A       | N/A       | N/A    |
| 39    | 0.037      | N/A       | N/A       | 0.041      | N/A       | N/A       | N/A    |
| 40    | 0.020      | N/A       | N/A       | 0.023      | N/A       | N/A       | N/A    |

Note: Measured I-ref was applied for this test.

## Voltage Source Verification Data (Run time)

EUT: Off-grid inverter Tested by: LIMING SUI  
Test category: Table:2, Rsce=33, Inter-Harm, Test Margin: 100  
Test date: 2025/5/18 Start time: 9:57:30 End time: 10:00:12  
Test duration (min): 2.5 Data file name: CTSMXH\_H-000015.cts\_data  
Comment: AC Charging & AC Back UP  
Customer: INVT Solar Technology (ShenZhen) Co., Ltd.

Test Result: Pass Source qualification: Normal  
Measured source distortion is within the requirements of the standards  
Measurements are compliant with IEC/EN61000-3-12 Ed. 2.0 & IEC/EN61000-4-7 Ed. 2.1

### Highest parameter values during test:

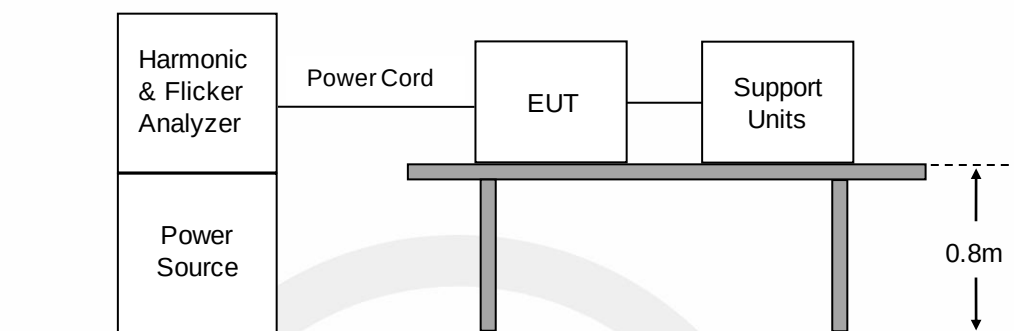
|                 |             |                 |        |
|-----------------|-------------|-----------------|--------|
| Voltage (Vrms): | 230.23      | Frequency (Hz): | 50.00  |
| I_Peak (Amps):  | 26.847      | I_RMS (Amps):   | 18.017 |
| I_Fund (Amps):  | 17.819(avg) | Crest Factor:   | 1.507  |
| Power (Watts):  | 4169        | Power Factor:   | 0.998  |

| Harm# | Harmonics V-rms | Limit V-rms | % of Limit | Status |
|-------|-----------------|-------------|------------|--------|
| 2     | 0.091           | 0.921       | 9.83       | OK     |
| 3     | 0.161           | 2.877       | 5.59       | OK     |
| 4     | 0.028           | 0.921       | 3.06       | OK     |
| 5     | 0.091           | 3.453       | 2.63       | OK     |
| 6     | 0.023           | 0.921       | 2.49       | OK     |
| 7     | 0.134           | 2.877       | 4.67       | OK     |
| 8     | 0.026           | 0.921       | 2.86       | OK     |
| 9     | 0.146           | 1.381       | 10.54      | OK     |
| 10    | 0.023           | 0.921       | 2.52       | OK     |
| 11    | 0.141           | 1.611       | 8.77       | OK     |
| 12    | 0.030           | 0.690       | 4.28       | OK     |
| 13    | 0.142           | 1.381       | 10.30      | OK     |
| 14    | 0.047           | 0.691       | 6.74       | OK     |
| 15    | 0.158           | 0.691       | 22.82      | OK     |
| 16    | 0.040           | 0.691       | 5.79       | OK     |
| 17    | 0.150           | 0.691       | 21.76      | OK     |
| 18    | 0.039           | 0.691       | 5.68       | OK     |
| 19    | 0.144           | 0.690       | 20.92      | OK     |
| 20    | 0.053           | 0.691       | 7.74       | OK     |
| 21    | 0.145           | 0.690       | 20.93      | OK     |
| 22    | 0.048           | 0.691       | 6.97       | OK     |
| 23    | 0.135           | 0.691       | 19.50      | OK     |
| 24    | 0.043           | 0.691       | 6.16       | OK     |
| 25    | 0.131           | 0.691       | 18.95      | OK     |
| 26    | 0.048           | 0.691       | 6.98       | OK     |
| 27    | 0.117           | 0.691       | 16.88      | OK     |
| 28    | 0.049           | 0.691       | 7.07       | OK     |
| 29    | 0.113           | 0.691       | 16.39      | OK     |
| 30    | 0.038           | 0.691       | 5.57       | OK     |
| 31    | 0.099           | 0.691       | 14.31      | OK     |
| 32    | 0.035           | 0.691       | 5.10       | OK     |
| 33    | 0.102           | 0.690       | 14.82      | OK     |
| 34    | 0.036           | 0.690       | 5.16       | OK     |
| 35    | 0.100           | 0.690       | 14.48      | OK     |
| 36    | 0.046           | 0.691       | 6.66       | OK     |
| 37    | 0.085           | 0.691       | 12.28      | OK     |
| 38    | 0.043           | 0.691       | 6.20       | OK     |
| 39    | 0.077           | 0.690       | 11.20      | OK     |
| 40    | 0.046           | 0.691       | 6.70       | OK     |

Minimum Rsce required: Rsce = 5.360  
Phase A = 16.2% of tested Rsce = 33.000, Rsce = 5.360

## 7. VOLTAGE FLUCTUATION AND FLICKER MEASUREMENT

### 7.1 Block Diagram of Test Setup



### 7.2 Standard Limits

EN IEC 61000-3-11 Limits

The limits shall be applicable to voltage fluctuations and flicker at the supply terminals of the equipment under test, measured or calculated according to clause 4 under test conditions described in clause 6. Tests made to prove the compliance with the limits are considered to be type tests.

The following limits apply:

- the value of the short-term flicker indicator,  $P_{st}$  shall not be greater than 1,0;
- the value of the long-term flicker indicator,  $P_{lt}$  shall not be greater than 0,65;
- the value of  $d(t)$  during a voltage change shall not exceed 3,3 % for more than 500 ms;
- the relative steady-state voltage change,  $d_c$ , shall not exceed 3,3 %;
- the maximum relative voltage change  $d_{max}$ , shall not exceed:

### 7.3 Test Procedure

The total impedance of the test circuit, excluding the appliance under test, but including the internal impedance of the supply source, shall be equal to the reference impedance. The stability and tolerance of the reference impedance shall be adequate to ensure that the overall accuracy of 8% is achieved during the whole assessment procedure.

### 7.4 Test Results

**PASS.**

Please see the attached pages.

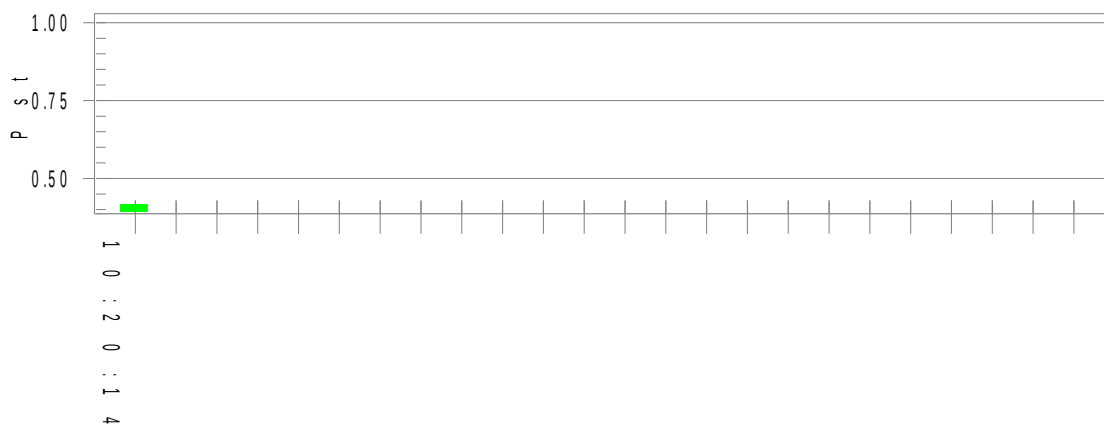
## Flicker Test Summary Per EN/IEC61000-3-11 (Run time)

EUT: Off-grid inverter  
Test category: All parameters  
Test date: 2025/5/18  
Test duration (min): 10  
Comment: AC Charging & AC Back UP  
Customer: INVT Solar Technology (ShenZhen) Co., Ltd.  
Z-test = (0.400 + j 0.250 Ohm)

Tested by: LIMING SUI  
Test Margin: 100  
Start time: 10:09:53  
End time: 10:20:20  
Data file name: CTSMXH\_F-000016.cts\_data

Test Result: Pass  
Status: Test Completed

### Pst<sub>i</sub> and limit line



### Parameter values recorded during the test:

Vrms at the end of test (Volt): 226.85

|                               |       |                  |       |      |
|-------------------------------|-------|------------------|-------|------|
| T-max (mS):                   | 0.0   | Test limit (mS): | 500.0 | Pass |
| Highest dc (%):               | 0.00  | Test limit (%):  | 3.30  | Pass |
| Highest dmax (%):             | 0.07  | Test limit (%):  | 4.00  | Pass |
| Highest Pst (10 min. period): | 0.416 | Test limit:      | 1.000 | Pass |

Calculated dmax(%): 0.000  
Calculated dc(%): 0.000  
Calculated Pst : 0.416  
Calculated Plt : 0.182

### The maximum permissible system impedance Zsys:

Z = 1.491 Ohm + j 0.932 Ohm (1.491 Ohm + 2967 uH)

## 8. IMMUNITY PERFORMANCE CRITERIA DESCRIPTION

### Performance Level

The test results shall be classified in terms of the loss of function or degradation of performance of the equipment under test, relative to a performance level by its manufacturer or the requestor of the test, or the agreed between the manufacturer and the purchaser of the product.

Definition related to the performance level:

1. Based on the used product standard
2. Based on the declaration of the manufacturer, requestor or purchaser

#### Criterion A:

The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.

#### Criterion B:

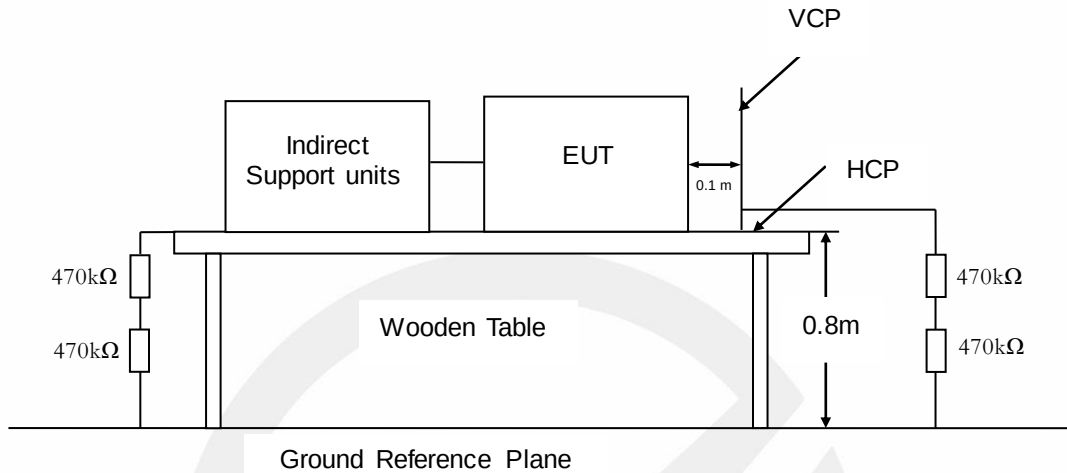
The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed. No change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.

#### Criterion C:

Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

## 9. ELECTROSTATIC DISCHARGE IMMUNITY TEST

### 9.1 Block Diagram of Test Setup



### 9.2 Test Standard

EN IEC 61000-6-2: 2019  
(IEC 61000-4-2:2008 Severity Level: 3 / Air Discharge:  $\pm 8\text{kV}$ ;  
Level: 2 / Contact Discharge:  $\pm 4\text{kV}$ )

### 9.3 Severity Levels and Performance Criterion

#### 9.3.1 Severity level

| Level | Test Voltage<br>Contact Discharge (kV) | Test Voltage<br>Air Discharge (kV) |
|-------|----------------------------------------|------------------------------------|
| 1     | $\pm 2$                                | $\pm 2$                            |
| 2     | $\pm 4$                                | $\pm 4$                            |
| 3     | $\pm 6$                                | $\pm 8$                            |
| 4     | $\pm 8$                                | $\pm 15$                           |
| X     | Special                                | Special                            |

#### 9.3.2 Performance criterion: B

## 9.4 Test Procedure

### 9.4.1 Air Discharge:

This test is done on a non-conductive surface. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

### 9.4.2 Contact Discharge:

All the procedure shall be same as Section 9.4.1. Except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

### 9.4.3 Indirect discharge for horizontal coupling plane

At least 10 single discharges (in the most sensitive polarity) shall be applied at the front edge of each HCP opposite the center point of each unit (if applicable) of the EUT and 0.1m from the front of the EUT. The long axis of the discharge electrode shall be in the plane of the HCP and perpendicular to its front edge during the discharge.

### 9.4.4 Indirect discharge for vertical coupling plane

At least 10 singles discharge (in the most sensitive polarity) shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m×0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

## 9.5 Test Results

**PASS.**

Please refer to the following page.

## Electrostatic Discharge Test Results

EMTEK (SHENZHEN) CO., LTD.

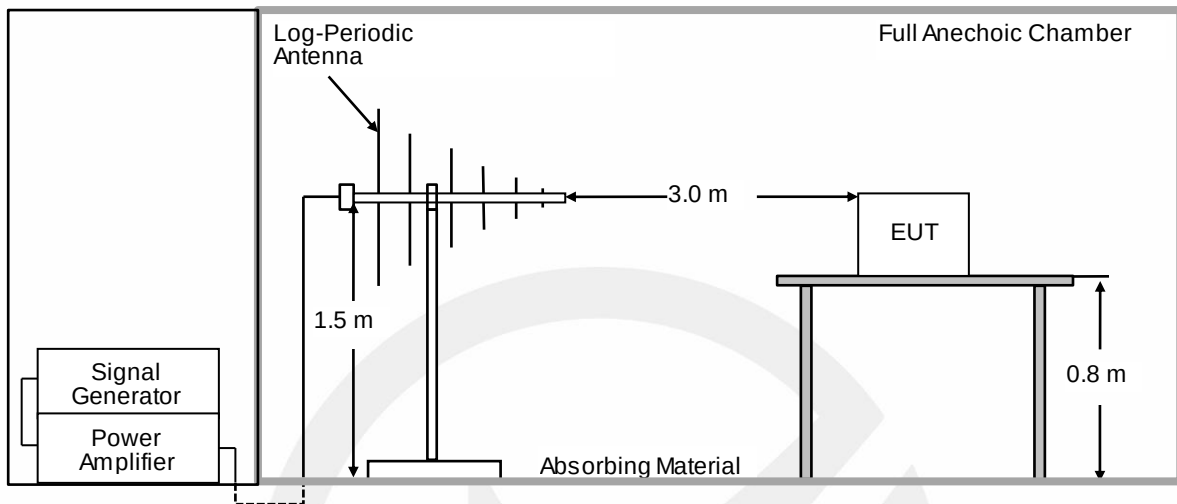
|                   |                                                                    |                      |              |
|-------------------|--------------------------------------------------------------------|----------------------|--------------|
| Applicant         | : INVT Solar Technology (ShenZhen) Co., Ltd.                       |                      |              |
| EUT               | : Off-grid inverter                                                | Test Date            | : 2025-05-18 |
| M/N               | : XN3624-MAX                                                       | Temperature          | : 21.9℃      |
| Power Supply      | : DC 450V, AC 230V/50Hz, DC 24V                                    | Humidity             | : 51%        |
| Air discharge     | : $\pm 8.0\text{kV}$                                               | Atmospheric Pressure | : 101 kPa    |
| Contact discharge | : $\pm 4.0\text{kV}$                                               | Criterion            | : B          |
| Test Mode         | : PV IN&AC Back Up, AC Charging&AC Back Up, Discharging&AC Back Up |                      |              |

| Location               | Kind<br>A-Air Discharge<br>C-Contact Discharge | Result |
|------------------------|------------------------------------------------|--------|
| METAL/SCREW            | C                                              | A      |
| SLOT/BUTTON/SCREEN/LED | A                                              | A      |
| HCP of all sides       | C                                              | A      |
| VCP of front           | C                                              | A      |
| VCP of rear            | C                                              | A      |
| VCP of left            | C                                              | A      |
| VCP of right           | C                                              | A      |
|                        |                                                |        |
|                        |                                                |        |
|                        |                                                |        |
|                        |                                                |        |

Note: /

## 10. RF FIELD STRENGTH SUSCEPTIBILITY TEST

### 10.1 Block Diagram of Test Setup



### 10.2 Test Standard

EN IEC 61000-6-2: 2019  
(IEC 61000-4-3:2006+A1:2007+A2:2010, Severity Level : 3V/m, 10V/m)

### 10.3 Severity Levels and Performance Criterion

#### 10.3.1 Severity Levels

| Level | Field Strength V/m |
|-------|--------------------|
| 1.    | 1                  |
| 2.    | 3                  |
| 3.    | 10                 |
| X     | Special            |

#### 10.3.2 Performance Criterion: A

## 10.4 Test Procedure

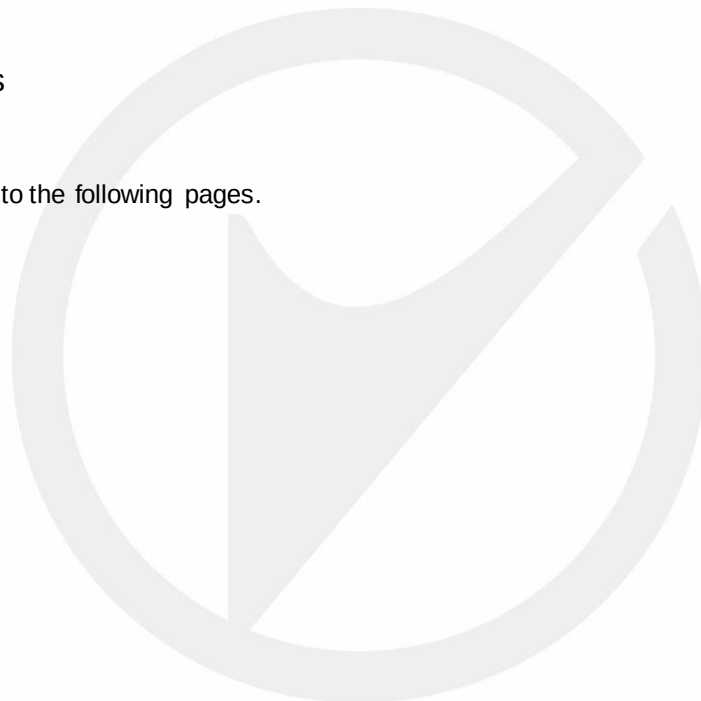
The procedure defined in this part requires the generation of electromagnetic fields within which the test sample is placed and its operation observed. To generate fields that are useful for simulation of actual (field) conditions may require significant antenna drive power and the resultant high field strength levels. To comply with local regulations and to prevent biological hazards to the testing personnel, it is recommended that these tests be carried out in a shielded enclosure or semi-anechoic chamber.

- a. The antenna which is enabling the complete frequency range of 80-6000 MHz is placed 3m away from the equipment. The required field strength is determined by placing the field strength meter(s) on top of or directly alongside the equipment under test and monitoring the field strength meter via a remote field strength indicator outside the enclosure while adjusting the continuous-wave to the antenna.
- b. The test is performed with the antenna facing the front and back sides of the EUT with. Both vertical and horizontal polarizations from antenna are tested.

## 10.5 Test Results

**PASS.**

Please refer to the following pages.



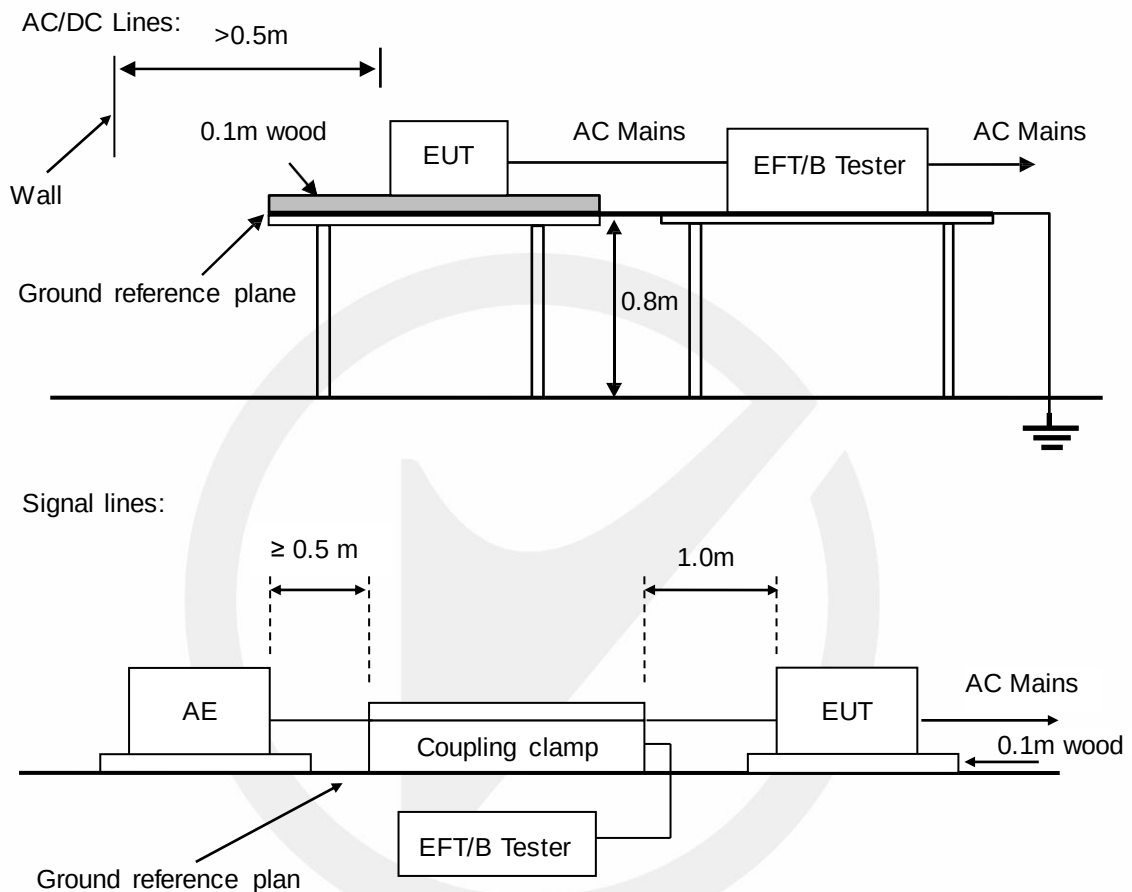
## RF Field Strength Susceptibility Test Results

EMTEK (SHENZHEN) CO., LTD.

|                                                                                                                          |            |                                                        |            |          |
|--------------------------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------|------------|----------|
| Applicant : INVT Solar Technology (ShenZhen) Co., Ltd.                                                                   |            |                                                        |            |          |
| EUT : Off-grid inverter                                                                                                  |            | Test Date : 2025-05-18                                 |            |          |
| M/N : XN3624-MAX                                                                                                         |            | Temperature : 21.5℃                                    |            |          |
| Field Strength : 10 V/m, 3V/m                                                                                            |            | Humidity : 50%                                         |            |          |
| Power Supply : DC 450V, AC 230V/50Hz, DC 24V                                                                             |            | Criterion : A                                          |            |          |
| Test Mode : PV IN&AC Back Up, AC Charging&AC Back Up, Discharging&AC Back Up                                             |            | Frequency Range : 80MHz to 1000MHz, 1400MHz to 6000MHz |            |          |
| Modulation: <input type="checkbox"/> None <input type="checkbox"/> Pulse <input checked="" type="checkbox"/> AM 1kHz 80% |            |                                                        |            |          |
| Frequency Rang 1: 80MHz to 1000MHz                                                                                       |            | Frequency Rang 2: 1400MHz to 6000MHz                   |            |          |
| Field Strength                                                                                                           | 10V/m      |                                                        | 3V/m       |          |
| Steps                                                                                                                    | 1%         |                                                        |            |          |
|                                                                                                                          | Horizontal | Vertical                                               | Horizontal | Vertical |
| Front                                                                                                                    | A          | A                                                      | A          | A        |
| Right                                                                                                                    | A          | A                                                      | A          | A        |
| Rear                                                                                                                     | A          | A                                                      | A          | A        |
| Left                                                                                                                     | A          | A                                                      | A          | A        |
| Note:                                                                                                                    |            |                                                        |            |          |

## 11. ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST

### 11.1 Block Diagram of Test Setup



### 11.2 Test Standard

EN IEC 61000-6-2: 2019

(IEC 61000-4-4:2012, Severity Level for AC Line: 2kV, DC Line/Signal/control ports  $\pm 1\text{kV}$ )

## 11.3 Severity Levels and Performance Criterion

### 11.3.1 Severity level

| Open Circuit Output Test Voltage $\pm 10\%$ |                       |                                                     |
|---------------------------------------------|-----------------------|-----------------------------------------------------|
| Level                                       | On Power Supply Lines | On I/O (Input/Output) Signal data and control lines |
| 1                                           | 0.5 kV                | 0.25 kV                                             |
| 2                                           | 1 kV                  | 0.5 kV                                              |
| 3                                           | 2 kV                  | 1 kV                                                |
| 4                                           | 4 kV                  | 2 kV                                                |
| X                                           | Special               | Special                                             |

### 11.3.2 Performance criterion: B

## 11.4 Test Procedure

The EUT is put on the table that is 0.8 meter high above the ground. This reference ground plane shall project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

## 11.5 Test Results

**PASS.**

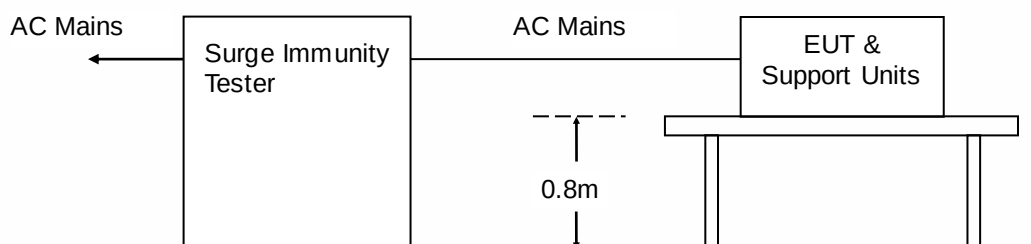
Please refer to the following page.

EMTEK (SHENZHEN) CO., LTD.

深圳信测标准技术服务股份有限公司 地址:广东省深圳市南山区马家龙工业区69栋 网址:[Http://www.emtek.com.cn](http://www.emtek.com.cn) 邮箱:[cs.rep@emtek.com.cn](mailto:cs.rep@emtek.com.cn)  
EMTEK (Shenzhen) Co., Ltd. Add: Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China [Http://www.emtek.com.cn](http://www.emtek.com.cn) E-mail: [cs.rep@emtek.com.cn](mailto:cs.rep@emtek.com.cn)  
**Report No. ENS2510110131E00301R** **Page 37 of 60** **Ver.1.0**

## 12. SURGE IMMUNITY TEST

### 12.1 Block Diagram of Test Setup



### 12.2 Test Standard

EN IEC 61000-6-2: 2019  
(IEC 61000-4-5:2014)

### 12.3 Severity Levels and Performance Criterion

#### 12.3.1 Severity level

| Severity Level | Open-Circuit Test Voltage<br>kV |
|----------------|---------------------------------|
| 1              | 0.5                             |
| 2              | 1.0                             |
| 3              | 2.0                             |
| 4              | 4.0                             |
| *              | Special                         |

#### 12.3.2 Performance criterion: B

### 12.4 Test Procedure

This test simulates a lightning event by inducing transients onto the AC/DC power supply lines in common mode (Line to Ground) and differential mode (Line to Line). Each device was tested in a total of two surge configurations: Line to Ground (L-G): Combination Wave, Line to Protective Earth with 9uF and 10Ohm and Neutral to Protective Earth with 9uF and 10Ohm, common mode, generator earthed.

Line to Line (L-L): Combination Wave,

Line to Neutral with 18uF, differential mode, generator floated.

2 ohm : the source impedance of the low-voltage power supply network.

12 ohm : the source impedance of the low-voltage power supply network and ground.

- If not otherwise specified the surges have to be applied synchronized to the voltage phase at the zero-crossing and the peak value of the a.c. voltage wave (positive and negative).
- The surges have to be applied line to line and line to earth. When testing line to earth, the test voltage has to be applied successively between each of the lines and earth, if there is no other specification.
- The test procedure shall also consider the non-linear current-voltage characteristics of the equipment under test. Therefore the test voltage has to be increased by steps up to the test level specified in the product standard or test plan. All lower levels including the selected test level shall be satisfied.
- For testing the secondary protection, the output voltage of the generator shall be increased up to the

worst-case voltage breakdown level (let-through level) of the primary protection.

e. Testing shall be performed according to a Test Plan, which shall be included in the test report.

f. To find all critical points of the duty cycle of the equipment, a sufficient number of positive and negative test pulses shall be applied.

## 12.5 Test Results

**PASS.**

Please refer to the following pages.



EMTEK (SHENZHEN) CO., LTD.

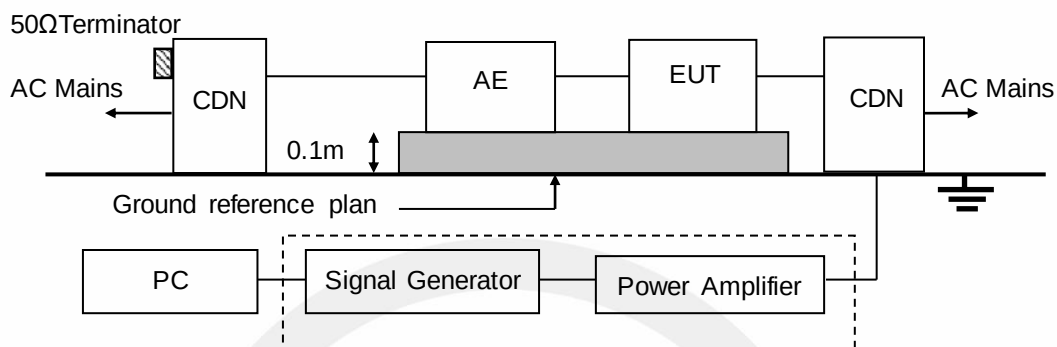
|              |                                                           |             |                     |
|--------------|-----------------------------------------------------------|-------------|---------------------|
| Applicant    | : <u>INVT Solar Technology (ShenZhen) Co., Ltd.</u>       |             |                     |
| EUT          | : <u>Off-grid inverter</u>                                | Test Date   | : <u>2025-05-18</u> |
| M/N          | : <u>XN3624-MAX</u>                                       | Temperature | : <u>24.1℃</u>      |
| Power Supply | : <u>DC 450V, AC 230V/50Hz</u>                            | Humidity    | : <u>52%</u>        |
| Test Mode    | : <u>PV IN&amp;AC Back Up, AC Charging&amp;AC Back Up</u> | Criterion   | : <u>B</u>          |

[illegible]

Remark:

## 13. INJECTED CURRENTS SUSCEPTIBILITY TEST

### 13.1 Block Diagram of Test Setup



### 13.2 Test Standard

EN IEC 61000-6-2: 2019  
(IEC 61000-4-6:2013, Severity Level: Level 3, 10V (r.m.s.), 0.15MHz ~ 80MHz)

### 13.3 Severity Levels and Performance Criterion

#### 13.3.1 Severity level

| Level | Field Strength V |
|-------|------------------|
| 1     | 1                |
| 2     | 3                |
| 3     | 10               |
| X     | Special          |

#### 13.3.2 Performance criterion: A

### 13.4 Test Procedure

- The EUT shall be operated within its intended climatic conditions. The temperature and relative humidity should be recorded.
- The EUT is placed on a 0.1m high test table, and a well grounded cable is connected to metallic plane above the test table.
- All cables/wires must be laid out on test plate (3cm in thickness), and the EUT is set up on test plate (10 cm in thickness) as shown in test setup photo, and the cables/wires must not be in mid-air, they should be touching the surface of test plate. Ensure that the EUT is properly connected to the accessory equipment.
- The test shall be performed with the test generator connected to each of the coupling and decoupling devices in turn while the other non-excited RF-input ports of the coupling devices are terminated by a 50 ohm load resistor.
- The frequency range is swept from 150 kHz to 80 MHz, using the signal levels established during the setting process, and with the disturbance signal 80% amplitude modulated with a 1 kHz sine wave,

pausing to adjust the RF-signal level or to switch coupling devices as necessary. The rate of sweep shall not exceed  $1.5 \times 10^{-3}$  decades/s. Where the frequency is swept incrementally, the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.

f. The dwell time at each frequency shall not be less than the time necessary for the EUT to be exercised, and able to respond. Sensitive frequencies e.g. clock frequency (ies) and harmonics or frequencies of dominant interest shall be analyzed separately.

g. Attempts should be made to fully exercise the EUT during testing, and to fully interrogate all exercise modes selected for susceptibility

h. Testing shall be performed according to a Test Plan, which shall be included in the test report.

### 13.5 Test Results

**PASS.**

Please refer to the following page.



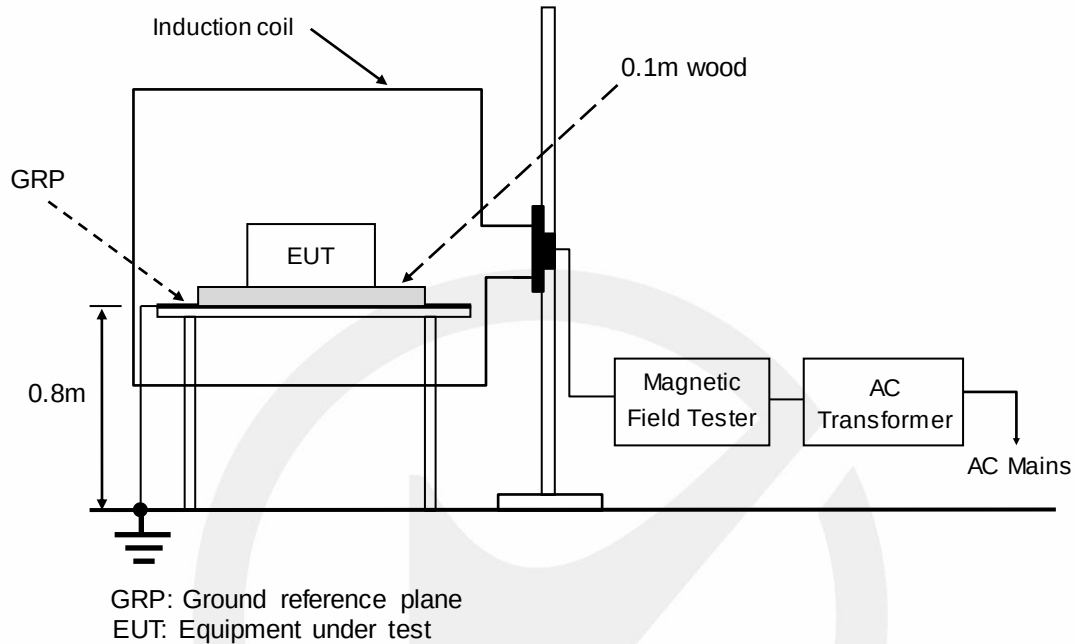
## Injected Currents Susceptibility Test Results

EMTEK (SHENZHEN) CO., LTD.

| Applicant : <u>INVT Solar Technology (ShenZhen) Co., Ltd.</u>                                                                                                                                                                                                                                                                                                             |                   |                               |           |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------|-----------|--------|
| EUT : <u>Off-grid inverter</u>                                                                                                                                                                                                                                                                                                                                            |                   | Test Date : <u>2025-05-18</u> |           |        |
| M/N : <u>XN3624-MAX</u>                                                                                                                                                                                                                                                                                                                                                   |                   | Temperature : <u>24.1℃</u>    |           |        |
| Power Supply : <u>DC 450V, AC 230V/50Hz</u>                                                                                                                                                                                                                                                                                                                               |                   | Humidity : <u>52%</u>         |           |        |
| Test Mode : <u>PV IN&amp;AC Back Up, AC Charging&amp;AC Back Up</u>                                                                                                                                                                                                                                                                                                       |                   | Criterion : <u>A</u>          |           |        |
| Frequency Range (MHz)                                                                                                                                                                                                                                                                                                                                                     | Injected Position | Strength (Unmodulated)        | Criterion | Result |
| 0.15 ~ 80                                                                                                                                                                                                                                                                                                                                                                 | AC Mains          | 10V                           | A         | A      |
| 0.15 ~ 80                                                                                                                                                                                                                                                                                                                                                                 | DC Line           | 10V                           | A         | A      |
|                                                                                                                                                                                                                                                                                                                                                                           |                   |                               |           |        |
| Test Mode : N/A                                                                                                                                                                                                                                                                                                                                                           |                   |                               |           |        |
| Frequency Range (MHz)                                                                                                                                                                                                                                                                                                                                                     | Injected Position | Strength (Unmodulated)        | Criterion | Result |
|                                                                                                                                                                                                                                                                                                                                                                           |                   |                               |           |        |
|                                                                                                                                                                                                                                                                                                                                                                           |                   |                               |           |        |
| Remark : 1. Modulation Signal:1kHz 80% AM<br>Measurement Equipment :<br>Simulator: CWS 500 (SWITZERLAND EMTEST)<br>CDN : <input type="checkbox"/> CDN-M2 (SWITZERLAND EMTEST)<br><input type="checkbox"/> CDN-M3 (SWITZERLAND EMTEST)<br><input checked="" type="checkbox"/> CDN-M532 (TESEQ)<br><input checked="" type="checkbox"/> Injection Clamp (EMTEST F-2031-23MM) |                   | Note:                         |           |        |

## 14. MAGNETIC FIELD SUSCEPTIBILITY TEST

### 14.1 Block Diagram of Test Setup



### 14.2 Test Standard

EN IEC 61000-6-2: 2019  
(IEC 61000-4-8:2009, Severity Level: Level 4, 30 A/m)

### 14.3 Severity Levels and Performance Criterion

#### 14.3.1 Severity Levels

| Level | Field Strength A/m |
|-------|--------------------|
| 1     | 1                  |
| 2     | 3                  |
| 3     | 10                 |
| 4     | 30                 |
| 5     | 100                |
| X     | Special            |

#### 14.3.2 Performance Criterion: A

#### 14.4 Test Procedure

The EUT is placed in the middle of a induction coil (1\*1m), under which is a 1\*1\*0.1m (high) table, this small table is also placed on a larger table, 0.8 m above the ground. Both horizontal and vertical polarization of the induction coil is set on test, so that each side of the EUT is affected by the magnetic field. Also can reach the same aim by change the position of the EUT.

#### 14.5 Test Results

**PASS.**

Please refer to the following page.



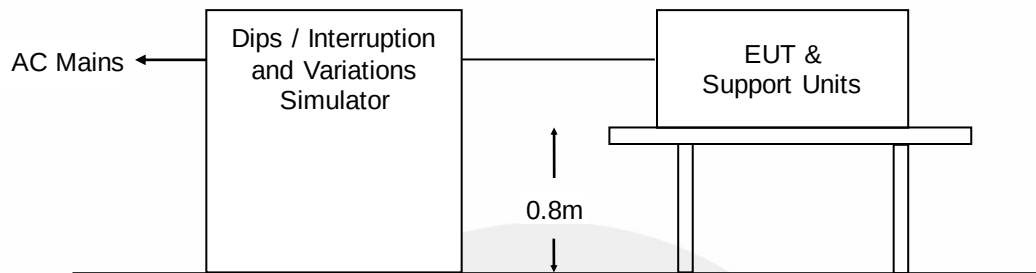
## Magnetic Field Immunity Test Results

EMTEK (SHENZHEN) CO., LTD.

|                                                                                                                                                                                                                                                                                                                                      |                     |                                                                                  |           |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------------------------------------------------------------|-----------|--------|
| Standard: <input checked="" type="checkbox"/> IEC 61000-4-8                                                                                                                                                                                                                                                                          |                     | Result: <input checked="" type="checkbox"/> PASS / <input type="checkbox"/> FAIL |           |        |
| <p>Applicant : <u>INVT Solar Technology (ShenZhen) Co., Ltd.</u></p> <p>EUT : <u>Off-grid inverter</u></p> <p>M/N : <u>XN3624-MAX</u></p> <p>Input Voltage : <u>DC 450V, AC 230V/50Hz, DC 24V</u></p> <p>Date of Test : <u>2025-05-18</u></p> <p>Ambient Condition : Temp : <u>24.1°C</u> Humid : <u>52%</u></p> <p>Criterion: A</p> |                     |                                                                                  |           |        |
| Operation Mode: PV IN&AC Back Up, AC Charging&AC Back Up, Discharging&AC Back Up                                                                                                                                                                                                                                                     |                     |                                                                                  |           |        |
| Test Level<br>(A/m)                                                                                                                                                                                                                                                                                                                  | Testing<br>Duration | Coil Orientation                                                                 | Criterion | Result |
| 30                                                                                                                                                                                                                                                                                                                                   | 5 mins              | X                                                                                | A         | A      |
| 30                                                                                                                                                                                                                                                                                                                                   | 5 mins              | Y                                                                                | A         | A      |
| 30                                                                                                                                                                                                                                                                                                                                   | 5 mins              | Z                                                                                | A         | A      |
| Operation Mode: N/A                                                                                                                                                                                                                                                                                                                  |                     |                                                                                  |           |        |
| Test Level<br>(A/m)                                                                                                                                                                                                                                                                                                                  | Testing<br>Duration | Coil Orientation                                                                 | Criterion | Result |
|                                                                                                                                                                                                                                                                                                                                      |                     |                                                                                  |           |        |
|                                                                                                                                                                                                                                                                                                                                      |                     |                                                                                  |           |        |
|                                                                                                                                                                                                                                                                                                                                      |                     |                                                                                  |           |        |
| Note:                                                                                                                                                                                                                                                                                                                                |                     |                                                                                  |           |        |

## 15. VOLTAGE DIPS AND INTERRUPTIONS TEST

### 15.1 Block Diagram of Test Setup



### 15.2 Test Standard

EN IEC 61000-6-2: 2019 (IEC 61000-4-11:2004, IEC 61000-4-34:2005+A1:2009)

### 15.3 Severity Levels and Performance Criterion

#### 15.3.1 Severity level

| Test Level<br>%UT | Voltage dip and short<br>interruptions<br>%UT | Duration<br>(in period) |
|-------------------|-----------------------------------------------|-------------------------|
| 0                 | 100                                           | 0.5<br>1<br>5           |
| 40                | 60                                            | 10<br>25<br>50          |
| 70                | 30                                            | *                       |

#### 15.3.2 Performance criterion: B&C

### 15.4 Operating Condition of EUT

15.4.1 Setup the EUT as shown on Section 15.1.

15.4.2 Turn on the power of all equipments.

15.4.3 Let the EUT work in test mode (AC Charging&AC Back Up) and test it.

## 15.5 Test Procedure

- 1) Set up the EUT and test generator as shown on Section 15.1.
- 2) The interruption is introduced at selected phase angles with specified duration.
- 3) Record any degradation of performance.

## 15.6 Test Results

**PASS.**

Please refer to the following page.



## Voltage Dips and Interruptions Test Results

EMTEK (SHENZHEN) CO., LTD.

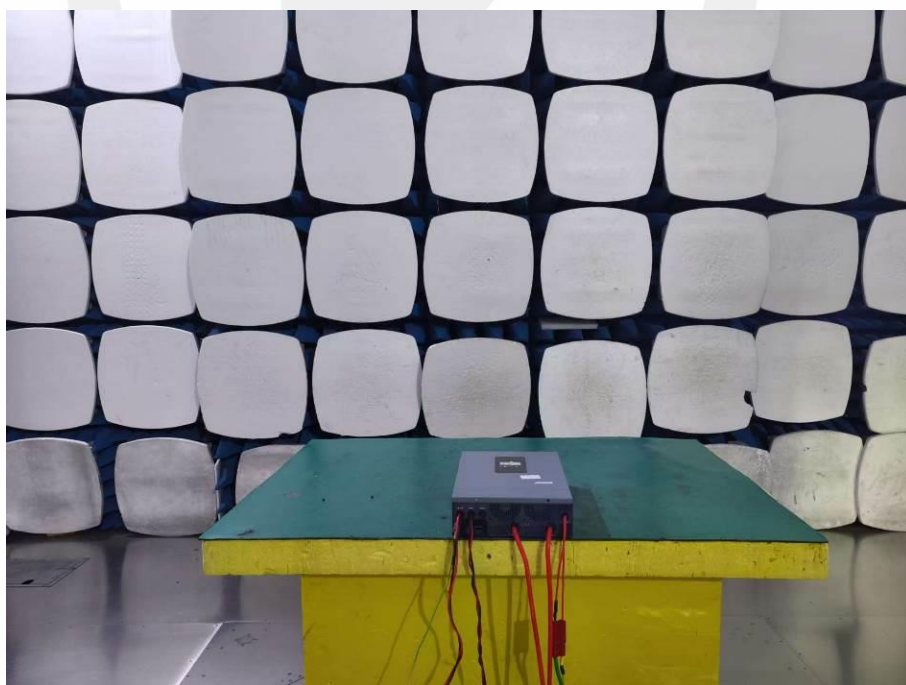
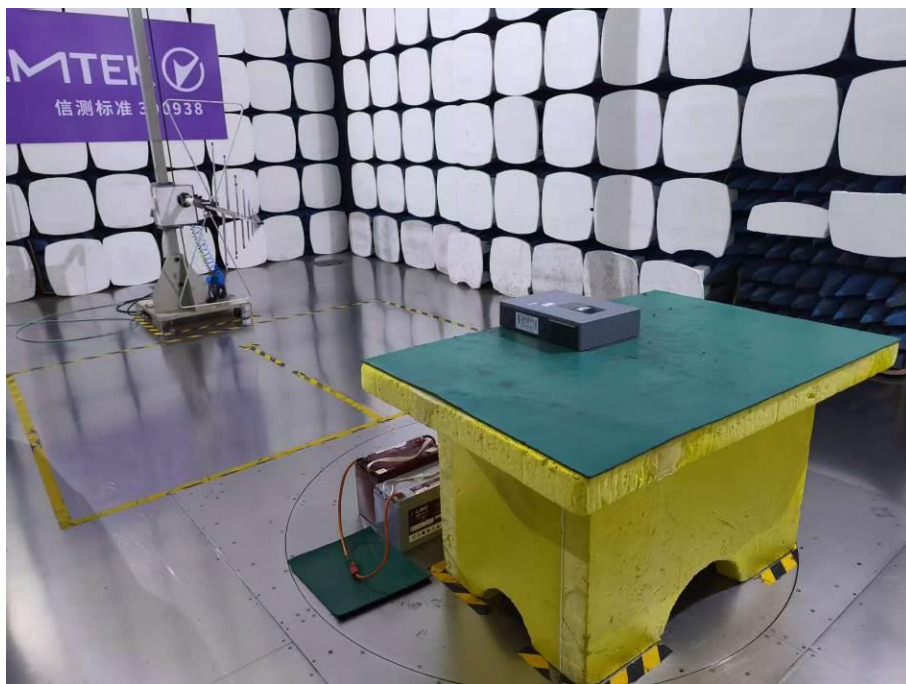
| Applicant : <u>INVT Solar Technology (ShenZhen) Co., Ltd.</u>                                                                                                 |                                                           |                               |                                                                                                                                                   |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| EUT : <u>Off-grid inverter</u>                                                                                                                                |                                                           | Test Date : <u>2025-05-18</u> |                                                                                                                                                   |        |
| M/N : <u>XN3624-MAX</u>                                                                                                                                       |                                                           | Temperature : <u>24.1℃</u>    |                                                                                                                                                   |        |
| Power Supply : <u>AC 230V/50Hz</u>                                                                                                                            |                                                           | Humidity : <u>52%</u>         |                                                                                                                                                   |        |
| Test Mode: AC Charging&AC Back Up                                                                                                                             |                                                           |                               |                                                                                                                                                   |        |
| Test Level<br>% U <sub>T</sub>                                                                                                                                | Voltage Dips &<br>Short Interruptions<br>% U <sub>T</sub> | Duration (in periods)         | Criterion<br><input type="checkbox"/> A <input checked="" type="checkbox"/> B<br><input checked="" type="checkbox"/> C <input type="checkbox"/> D | Result |
| 0                                                                                                                                                             | 100                                                       | 1P                            | B                                                                                                                                                 | A      |
| 40                                                                                                                                                            | 60                                                        | 10P                           | C                                                                                                                                                 | A      |
| 70                                                                                                                                                            | 30                                                        | 25P                           | C                                                                                                                                                 | A      |
| 0                                                                                                                                                             | 100                                                       | 250P                          | C                                                                                                                                                 | B      |
|                                                                                                                                                               |                                                           |                               |                                                                                                                                                   |        |
|                                                                                                                                                               |                                                           |                               |                                                                                                                                                   |        |
|                                                                                                                                                               |                                                           |                               |                                                                                                                                                   |        |
| <p>Note: When the voltage drops to 0% and 250P, the output of the prototype is interrupted and can be automatically restored after the test is completed.</p> |                                                           |                               |                                                                                                                                                   |        |

## 16. PHOTOGRAPHS

### 16.1 Photos of Conducted Emission Measurement



## 16.2 Photos of Radiation Emission Measurement



### 16.3 Photo of Harmonic / Flicker Measurement



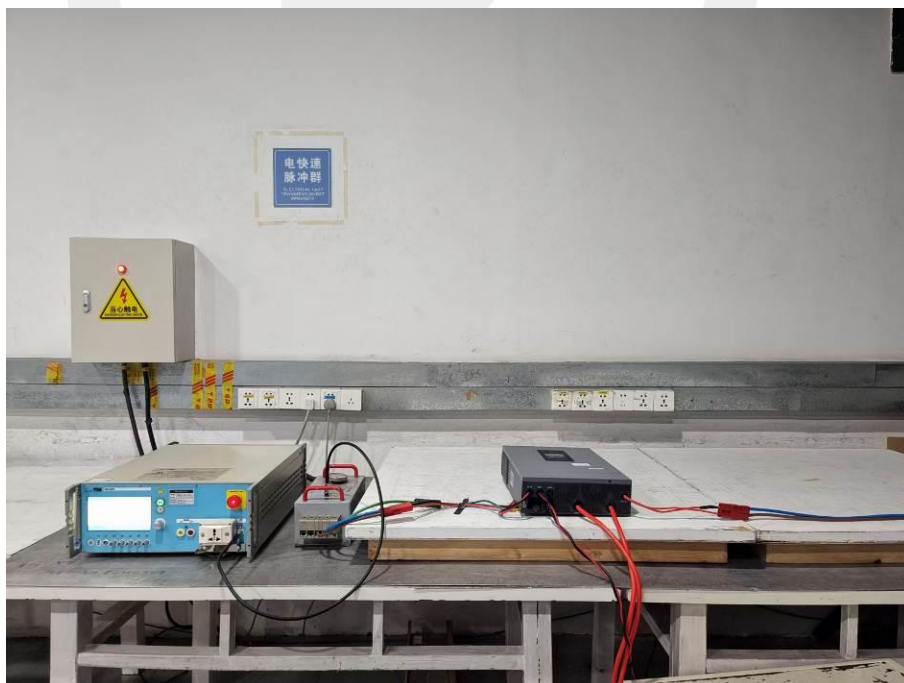
### 16.4 Photo of Electrostatic Discharge Test

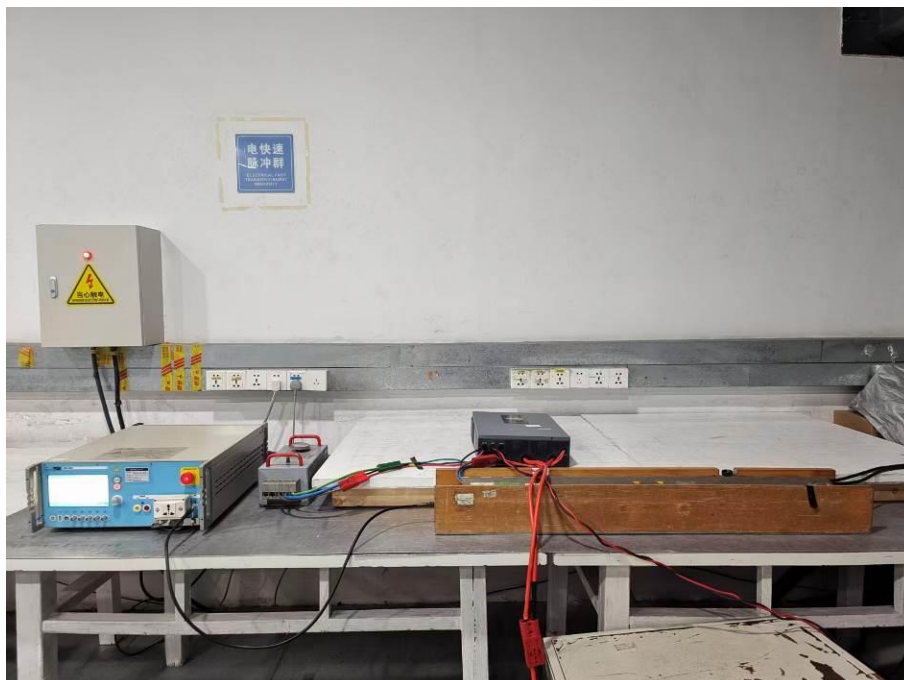


### 16.5 Photo of RF Field Strength Susceptibility Test



### 16.6 Photos of Electrical Fast Transient / Burst Test





16.7 Photo of Surge Test





16.8 Photos of Injected Currents Susceptibility Test





16.9 Photo of Magnetic Field Immunity Test

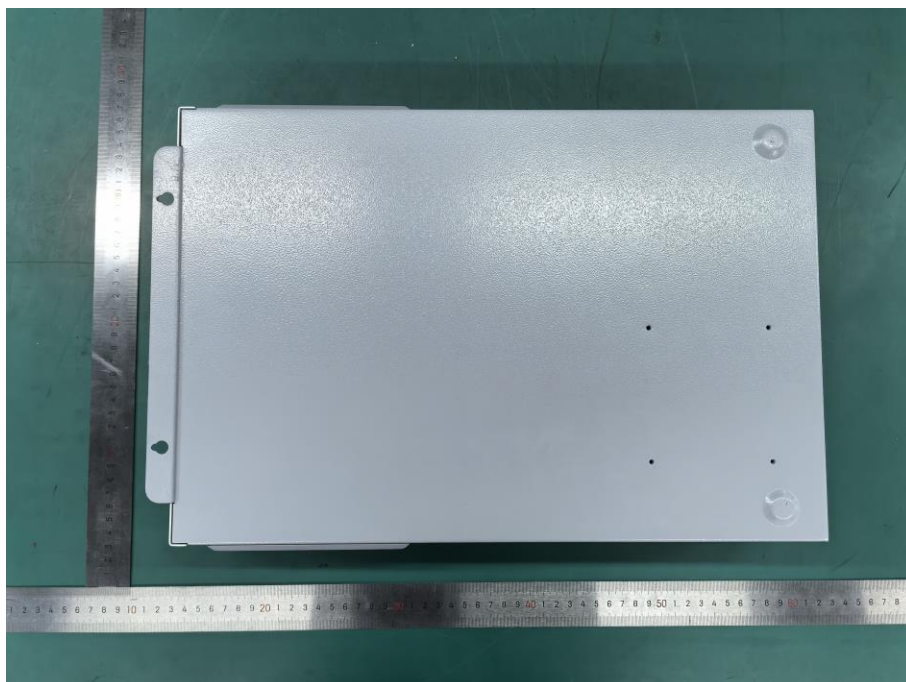


## 16.10 Photo of Voltage Dips and Interruptions Test



## APPENDIX: Photos of EUT





\*\*\*End of Report\*\*\*

## Statement

- 1 . This report is invalid without the signature of the authorized approver and "special seal for testing".
- 2 . This report shall not be copied partly without authorization.
- 3 . The test results or observations are applicable only to tested sample. Client shall be responsible for representativeness of the sample and authenticity of the material.
- 4 . The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
- 5 . The test results or observations are provided in accordance with measured value, without taking risks caused by uncertainty into account. Without explicit stipulation in special agreements, standards or regulations, EMTEK shall not assume any responsibility.
- 6 . Objections shall be raised within 20 days from the date receiving the report.