

## **ACOUSTIC NOISE TEST REPORT**

Report No. : ACOA24091001  
Product Name : POSITIVO MASTER D3500  
Model Number : POSITIVO MASTER D3500

**Spectrum Research  
& Testing Lab., Inc.**No.167, Ln. 780, Shan-Tong Rd.,  
Ling 8, Shan-Tong Li, Chung-Li Dist.,  
Taoyuan City 320, Taiwan (R.O.C.)**TEST REPORT**Reference No.: A24091001  
Report No.: ACOA24091001  
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Date: Sep. 11, 2024

Product Name : POSITIVO MASTER D3500  
Model Number : POSITIVO MASTER D3500  
Applicant : Positivo Tecnologia S.A.  
Rua João Bettega 5200 CIC Cutiriba, PR 81350-000 BRAZIL  
Date of Receipt : Sep. 10, 2024  
Final date of Test : Sep. 11, 2024

We, **Spectrum Research & Testing Laboratory Inc.**, hereby certify that one sample of the above was tested in our laboratory according to the specifications required by the applicant. Details of the results are given in the subsequent pages of this report. The test results in the report apply only to the sample(s) tested by SRT Lab; this report shall not be reproduced except in full, without the written approval of the laboratory.

Tested By: , Date: 9/11/2024

Approved By: , Date: 9/11/2024

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## 1. DOCUMENT POLICY, TEST STATEMENT

### 1.1 DOCUMENT POLICY

- The report shall not be reproduced except in full, without the written approval of SRT Lab, Inc.

### 1.2 TEST STATEMENT

- The test results in the report apply only to the unit tested by SRT Lab.
- This report provides the test procedures and the test result to verify the tested unit provided by the applicant for the following: operational capabilities under normal conditions, and operational capabilities under various environmental conditions.
- The data shown in this report reflects the test results for the condition described in the report.

### 1.3 EUT MODIFICATION

- No modifications were made by SRT Lab.

### 1.4 DECISION RULE

- To make sure the testing report(s) meet the requirement of ISO/IEC 17025:2017 standard and meet chapter 7.1 (Review of Requests, Tenders and Contracts), chapter 7.4 (Handling of Test or Calibration Items), chapter 7.8.2 (Reporting of Results – Common Requirement for Reports (Test, Calibration or Sampling)), This decision rule will be the base of adjustment (include the disclaimer scope) from SRT Lab.
- After communicate between SRT Lab. and clients /applicants and get the agreement, SRT Lab. will do the adjustment. According to this decision rule, SRT Lab. Manager(s) will do the Pass or Fail adjustment. (But one thing need to be concerned is, not every assessing rule suits all declaration of conformity assessing actions, it should be ruled depends on product's feature, test standard, technical regulation, test results, and also acceptance of risk of both sides.)
- This report according to the "description of applied standards and statements of conformity" on the report, as the decision rule.

|                                                                                                                                                                                                                                                      |                      |                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------|
|  <b>Spectrum Research &amp; Testing Lab., Inc.</b><br>No.167, Ln. 780, Shan-Tong Rd.,<br>Ling 8, Shan-Tong Li, Chung-Li Dist.,<br>Taoyuan City 320, Taiwan (R.O.C.) | <h1>TEST REPORT</h1> | Reference No.: A24091001<br>Report No.: ACOA24091001<br>Page:5 of 11<br>Date: Sep. 11, 2024 |
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## 1.4 REPORTING STATEMENTS OF CONFORMITY

Base on ISO/IEC 17025, the statements of conformity requirement of testing results.

- It does not need to provide the statements of conformity.
- It need to provide the statements of conformity and
  - Uses the Procedure 2 Accuracy Method & IECCE OD-5014 Accuracy Limits of IEC guide 115, not need for measurement uncertainty.
  - It need to provide additional uncertainty of the testing results or data on the report(s).

## 2. DESCRIPTION OF EUT AND TEST MODE

### 2.1 GENERAL DESCRIPTION OF EUT

General description of test unit:

|                  |                       |
|------------------|-----------------------|
| <b>Product</b>   | POSITIVO MASTER D3500 |
| <b>Model No.</b> | POSITIVO MASTER D3500 |

**NOTE:** For more detailed information, please refer to the EUT's specification or user's manual provided by manufacturer.

### 2.2 DESCRIPTION OF EUT INTERNAL DEVICE

| Device       | Brand / Marker | Model             | Remark                                                                                                                                                                                                                                                |
|--------------|----------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chassis      | POSITIVO       | POS-SFSH03        | 8.8 Liter                                                                                                                                                                                                                                             |
| POWER SUPPLY | POSITIVO       | PI-T450P-S (01)   | AC INPUT: 100-240VAC 8-4A 50-60Hz<br>DC OUTPUT / Max. Current:<br>+3.3V / 12A, +5V / 12A,<br>+12V / 37.5A, -12V / 0.3A,<br>-5VSB / 2.5A<br>Max Power: 80W for +3.3V and<br>+5V, 450W for +12V, 3.6W for<br>-12V, 12.5W for +5VSB<br>Total Power: 450W |
| Motherboard  | POSITIVO       | POS-RIH610FE      | ---                                                                                                                                                                                                                                                   |
| CPU          | intel          | i7-13700          | Overclocking: 5.2 GHz Max.                                                                                                                                                                                                                            |
| SSD          | SSSTC          | CL4-8D256         | 256 GB                                                                                                                                                                                                                                                |
| RAM          | ADATA          | AD5U560016GB-BHYA | DDR5 UDIMM, 5600MT/s 16GB                                                                                                                                                                                                                             |
| Software     | Passmark       | BurninTest 10.2   | ---                                                                                                                                                                                                                                                   |
| OS           | Microsoft      | Win11 x64 24H2    | ---                                                                                                                                                                                                                                                   |

|                                                                                                                                                                                                                                                      |                      |                                                                                             |
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## 2.3 DESCRIPTION OF SUPPORT UNIT

| Device   | Brand / Marker | Model   | Remark |
|----------|----------------|---------|--------|
| Monitor  | DELL           | U2410f  |        |
| Keyboard | Acer           | KU-0355 |        |
| Mouse    | ASUS           | JM3     |        |

**NOTE:** For the actual test configuration, please refer to the photos of testing.

## 2.4 DESCRIPTION OF TEST ITEM

The tested unit was tested according the specification required by applicant. The test specifications are described below:

| Item | Requirement                                        | Standard                                                | Remarks                                                                                                                                                  |
|------|----------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Acoustic pressure level (Noise) at idle            | ISO 7779<br>ISO 9296<br>NBR10152<br>Brazil's regulation | Maximum acoustic pressure level must be measured and provided.                                                                                           |
| 2    | Acoustic pressure level (Noise) at background task |                                                         | Maximum acoustic pressure level must be measured and provided.<br><br>Software PassMark Burn-in test at 50% workload for CPU and memory.                 |
| 3    | Acoustic pressure level (Noise) at full load       |                                                         | Maximum acoustic pressure level must be measured and provided.<br><br>Software PassMark Burn-in test at 100% workload for CPU, GPU, HDD, memory and ODD. |

## 3. TEST EQUIPMENTS

The following test equipment was used for the test:

| EQUIPMENT / FACILITIES | MANUFACTURER | MODEL# / SERIAL#  |
|------------------------|--------------|-------------------|
| Chamber                | SRT          | A01 / SRT001      |
| Sound Level Meter      | Lutron       | SL-4012 / I.99880 |

**NOTE:** The calibration interval of the test equipments above is one year.



## 4. ACOUSTIC PRESSURE TEST (NOISE)

Temperature: 25.4°C

Humidity: 64%R.H

Test Distance: 0.8m (From sound meter to Computer)

Test Height: From Ground to sound meter is 1.2m  
From Ground to Mini Computer bottom is 0.8m

### 4.1 ACOUSTIC PRESSURE TEST (NOISE) AT IDLE

Test Conditions: a. Ambient noise should be 10dB lower than test limits.

b. Software: Burn-in test at 0% workload for all HW

| # | Test Side of EUT | Status      | Test Result (dB) | Limit (dB) | Result |
|---|------------------|-------------|------------------|------------|--------|
| 1 | ---              | Ambient     | 31.8             | 43         | PASS   |
| 2 | Front            | Normal load | 31.7             | 43         | PASS   |
| 3 | Back             | Normal load | 32.1             | 43         | PASS   |
| 4 | Left             | Normal load | 41.5             | 43         | PASS   |
| 5 | Right            | Normal load | 40.3             | 43         | PASS   |
| 6 | Top              | Normal load | 31.5             | 43         | PASS   |
| 7 | Bottom           | Normal load | 31.8             | 43         | PASS   |



## 4.2 ACOUSTIC PRESSURE TEST (NOISE) AT BACKGROUND TASK

Test Conditions: a. Ambient noise should be 10dB lower than test limits.

b. Software: Burn-in test at 50% workload for all HW

| # | Test Side<br>of EUT | Status      | Test<br>Result<br>(dB) | Limit<br>(dB) | Result |
|---|---------------------|-------------|------------------------|---------------|--------|
| 1 | ---                 | Ambient     | 31.8                   | 43            | PASS   |
| 2 | Front               | Normal load | 32.1                   | 43            | PASS   |
| 3 | Back                | Normal load | 38.7                   | 43            | PASS   |
| 4 | Left                | Normal load | 34.7                   | 43            | PASS   |
| 5 | Right               | Normal load | 34.4                   | 43            | PASS   |
| 6 | Top                 | Normal load | 32                     | 43            | PASS   |
| 7 | Bottom              | Normal load | 32.3                   | 43            | PASS   |



## 4.3 ACOUSTIC PRESSURE TEST (NOISE) AT 100% LOAD

Test Conditions: a. Ambient noise should be 10dB lower than test limits.

b. Software: Burn-in test at 100% workload for all HW

| # | Test Side<br>of EUT | Status      | Test<br>Result<br>(dB) | Limit<br>(dB) | Result |
|---|---------------------|-------------|------------------------|---------------|--------|
| 1 | ---                 | Ambient     | 31.8                   | 43            | PASS   |
| 2 | Front               | Normal load | 34.7                   | 43            | PASS   |
| 3 | Back                | Normal load | 32.2                   | 43            | PASS   |
| 4 | Left                | Normal load | 41.8                   | 43            | PASS   |
| 5 | Right               | Normal load | 40.8                   | 43            | PASS   |
| 6 | Top                 | Normal load | 38.9                   | 43            | PASS   |
| 7 | Bottom              | Normal load | 39                     | 43            | PASS   |



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### 5. PHOTOS OF TESTING

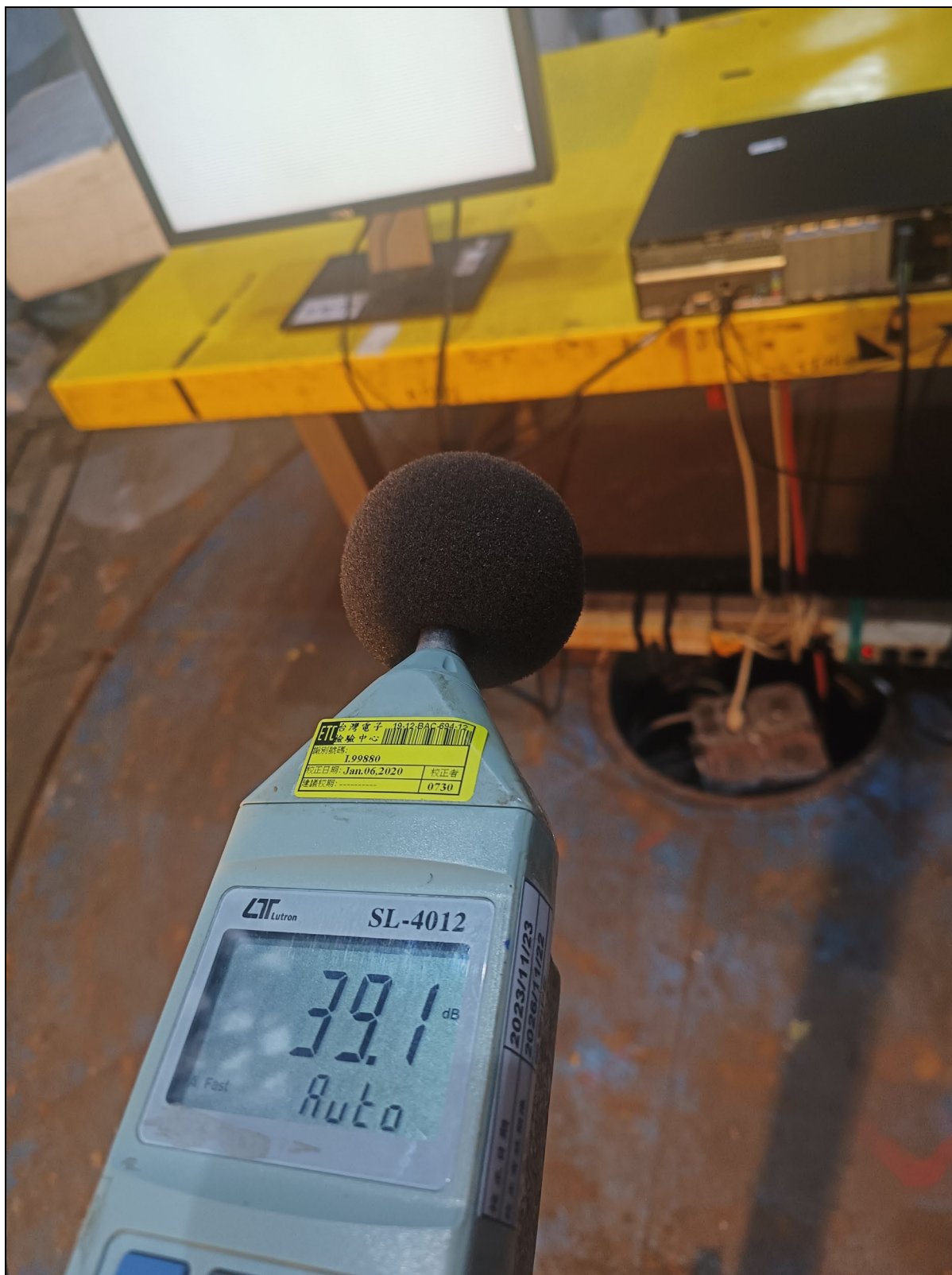




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