



The Testcenter facility 'LoRa<sup>®</sup> Test Lab' within IMST GmbH is recognized by the LoRa<sup>®</sup> Alliance for testing in accordance to the LoRaWAN<sup>®</sup> Specification V1.0.4

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# Testreport for Certification by Similarity according to LoRaWAN<sup>®</sup> (V1.0.4 EU868)

for the Device

**“SmartIO“**

for the Customer

**“Janz CGF S.A.”**

Jens Lerner

Yavuz Turan

4<sup>th</sup> July, 2024

## Administrative Summary

Location: IMST GmbH, Test Centre, Kamp-Lintfort, Germany

Responsible Test Engineer: Yavuz Turan, Jens Lerner

Subject: Test of Conformance to LoRaWAN® Specification V1.0.4 (EU868)

Company and Contact Information:

Janz CGF S.A.

Antonio Vendramini

Av. Infante D. Henrique, 286 | 288

1950-421 Lisboa

Portugal

Checked Device: SmartIO

Hardware version: 0.7

Firmware version: 1.0

Type and Version of used Stack: Stackforce, 8.0 Version

Original End-device identifier: sonic NANO

LoRa Device Class: A

LoRaWAN Specification version: V1.0.4

Certification requirements: LoRaWAN 1.0.4 End Device Certification Requirements V1.6.1

Frequency band(s): 868 MHz

Test Equipment: LCTT v3.13.0\_R1

Type of Certification by Similarity:

Case 2: Certification of an end-device variant from a certified end-device

Variant device differences to the referenced certified device:

- Same LoRa transceiver
- Same LoRaWAN protocol SW version
- Same MCU Core
- Same Clock design and implementation

Brief description of the differences between the primary and the variant device

Variant device only has laser and plastic engraving differences

Date: 4<sup>th</sup> July, 2024

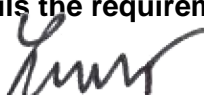
The Test Report, No. 6240483 has the following conclusion:

**The device fulfils the requirements.**

Responsibility: 

Yavuz Turan

Test Engineer

Approved: 

Jens Lerner

Quality Engineer

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Applied Methods of Measurement

## 1.1 Protocol Testing according to LoRaWAN® specification V1.0.4 (Class A device for EU868)

### Certification By Similarity Test Results By the Manufacturer:

Join tests with various parameters: **PASS**

Device Status Request: **PASS**

New Channel Request: **PASS**

DI Channel Request: **PASS**

RX Parameter Setup Request: **PASS**

RX Timing Setup Request: **PASS**

TX Parameter Setup Request: **PASS**

Link ADR Request: **PASS**

### Supported Optional Features:

Adaptive Data Rate (ADR) Yes

SF7BW250 (DR6) Yes

FSK50 (DR7) Yes

### Additional Tests By The Manufacturer:

Retransmission Back-Off for OTA devices only: **PASS**

Remarks: None

**Result: The device passed the test without limitations.**