



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

Testreport for Certification by Similarity according to LoRaWAN[®] (V1.0.4 EU868)

for the Device

“IOTSU L3 AQ05”

for the Customer

“Small Data Garden Oy”

Jens Lerner

Yavuz Turan

16th April, 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:

Small Data Garden Oy

Markus Madetoja

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Finland

Checked Device: IOTSU L3 AQ05

Hardware version: v1

Firmware version: v2.3

Type and Version of used Stack: Stackforce, V4.7.0 Version

Original End-device identifier: IOTSU L3 TH02

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 v3.12.0_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

Sensors.

Date: 16th April, 2024

The Test Report, No. 6240328 has the following conclusion:

The device fulfils the requirements.

Responsibility:  Approved: 
Yavuz Turan Jens Lerner
Test Engineer 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.