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 US915)

for the Device

"TX CO2/VOC/T&H AMB 600-123"

for the Customer

"Enless Wireless"

Jens Lerner
Yavuz Turan

22nd May, 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 (US915)
Company and Contact Information:
Enless Wireless
Théo Benissan
6bis rue du Temple
33000 Bordeaux
France
Checked Device: TX CO2/VOC/T&H AMB 600-123
Hardware version: Rev 3.00
Firmware version: V2.02.01
Type and Version of used Stack: Own, 02 Version
Original End-device identifier: TX TEMP INS 600-131
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): 915 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
TX CO2 VOC T&H AMB 600-123 is an ambient transmitter with different enclosure than TX TEMP INS 600-131. It can also measure CO2/VOC & humidity

Date: 22nd May, 2024

The Test Report, No. 6240270 has the following conclusion:

The device fulfils the requirements.

Responsibility: Yavuz Turan, Test Engineer Approved: Jens Lerner, Quality Engineer

Applied Methods of Measurement

1.1 Protocol Testing according to LoRaWAN® specification V1.0.4 (Class A device for US915)

Certification By Similarity Test Results By the Manufacturer:

Join tests with various parameters: **PASS**
Device Status Request: **PASS**
New Channel Request**: PASS**
Dl 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)	No

Additional Tests By The Manufacturer:

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

Remarks: None

Result: The device passed the test without limitations.