Testreport for Certification by Similarity according to LoRaWAN® (V1.0.4 US915)

for the Device

"TX 4/20 mA 600-135"

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 4/20 mA 600-135

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

Transmitter with one 4/20 mA input

Date: 22nd May, 2024

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

The device fulfils the requirements.

Responsibility: Approved:

Yavuz Turan   Jens Lerner

Test Engineer   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**
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)   No

Additional Tests By The Manufacturer:

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

Remarks: None

Result: The device passed the test without limitations.

LoRa® Alliance