

LoRaWAN Certification Test Report

Date: 29th of October, 2016

Location: Espotel Oy, Jyväskylä Test Laboratory, Finland

Responsible Test Engineer: Sampo Mäkelä

Company and Contact Information:

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Tested Device: ELSYS ERS

Firmware version: V2.0

Hardware version: REV B

End-device identifier: fe-03-00-1a (ABP), a8-17-58-ff-fe-03-00-1a (OTA)

LoRa Device Class: A

LoRaWAN Specification version: V1.0.1

Certification requirements: LoRa End Device Certification EU Version1.2

Frequency band(s) tested: 868 MHz

Test Equipment:

Test Software Version: 1.1.7

Semtech IOT SX1301 Starter Kit: Gateway software version 3.1.0

Packet forwarder software version 2.1.0

Test Result: **PASS**

Detailed Test Results:

Test Mode activation (Activation by Personalization): **PASS**

Test Mode activation (Over the Air Activation): **PASS**

Test application functionality: **PASS**

Packet Error Rate RX2 SF12: **PASS**

Cryptography: **PASS**

Downlink Window Timing: **PASS**

Frame Sequence Number: **PASS**

Device Status Request: **PASS**

Mac Commands: **PASS**

New Channel Request: **PASS**

Confirmed packets: **PASS**

RX Parameter Setup Request: **PASS**

RX timing setup request: **PASS**

Link ADR Request: **PASS**

Packet error rate RX1 Window: **PASS**

Packet error rate RX2 Window: **PASS**

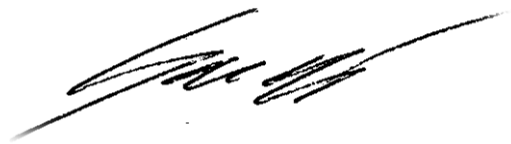
Supported Optional Features:

Adaptive Data Rate (ADR): **Yes**

SF7, BW250 kHz: **No**

FSK, 50 kbps: **No**

Remarks: None.



Sampo Mäkelä, Espotel Oy