

# LoRaWAN Certification Test Report

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Date: 7<sup>th</sup> of March 2016

Location: Espotel Oy, Jyväskylä Test Laboratory, Finland

Responsible Test Engineer: Petteri Aimonen

Company and Contact Information:

Multitech Systems Inc.  
David Smith  
2205 Woodale Dr  
55112, Mounds View, MN  
USA

Tested Device: MultiConnect mDot

Firmware version: 1.0.4

Hardware version: Rev B

End-device identifier: 008000000000ABB8

LoRa Device Class: A

LoRaWAN Specification version: V1.0

Certification requirements: LoRa End Device Certification EU Version1.1

Frequency band(s) tested: 868 MHz

Test Equipment:

Test Software Version: 1.1.5  
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**  
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: **Yes**  
FSK, 50 kbps: **Yes**

Remarks: None.



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Petteri Aimonen, Espotel Oy