LoRaWAN® End-Device and Network Server Interoperability

Test Report Template

Project Information

Batch End Device: S2100 LoRaWAN Data Logger
（SKU 114992872）

Date of Report: Nov 4, 2026.

Test Engineer: Zhai Chenyang

Organization: **Seeed Studio**

Interoperability Test Plan Version: 1.1.1

LoRaWAN Version Tested (e.g. 1.0.2, 1.0.4): 1.0.3

Frequency Plan ID (e.g. EU868, US915, AS923, etc.) : EU868

Network Server Make/Model: Thing Park Enterprise
Product version: 8.1 Application version: 5.40.2

Gateway Make/Model: SenseCAP Multi-Platform LoRaWAN Indoor Gateway(SX1302-4G) - EU868

Application Server Make/Model:

Join Server Make/Model: Thing Park Enterprise
Product version: 8.1 Application version: 5.40.2

Device Under Test (DUT) Summary

DUT ID	DUT Make/Model	Act Modes (OTAA/ABP)	DUT Configuration Notes	Comments
1	S2100 LoRaWAN Data Logger （SKU 114992872）	OTAA/ABP	Off-the-shelf device intended for sale	LoRa Alliance certified End device

Summary of Test Results

DUT ID	Test Case	Test Description	Result (Pass/Fail/Partial)	Observed Events	Comments
DUT-1	3.2.1	Activation by Personalization (ABP) Test	PASS	Device successfully activated using ABP. Uplink frames accepted by the Network Server. Successful bidirectional communication verified using MAC commands (DevStatusReq/DevStatusAns).	ABP activation completed successfully.
DUT-1	3.2.2	Over The Air Activation - Join/Rejoin Process	PASS	The device successfully completed multiple OTAA Join procedures. Each Join Request was accepted by the Network Server; a Join Accept was received by the device, and a valid LoRaWAN session was established.	OTAA activation completed successfully.
DUT-1	3.2.3	Uplink Transmission	PASS	The network server received and successfully decoded the uplink data.	Uplink payload processed successfully without packet loss or protocol errors.

DUT-1	3.2.4	Downlink Transmission	PASS	The device successfully applied the downlink command and reported at the updated interval.	The device successfully changed its reporting interval from two minutes to one minute.
DUT-1	3.2.5	Class B Tests	N/A	Not supported.	Device supports Class A operation only.
DUT-1	3.2.6	Class C Tests	N/A	Not supported.	Device supports Class A operation only.

Test Engineer Summary and Notes (Batch Level)

Overall Interoperability Evaluation:

The S2100 LoRaWAN Data Logger (LoRaWAN 1.0.3, Class A) successfully completed all applicable interoperability tests with the ThingPark network server. The tests verified OTAA and ABP activation, repeated OTAA joins, uplink and downlink communication, and LoRaWAN MAC command exchanges. No interoperability issues affecting normal device operation were observed during testing.

Any Issues Encountered Across DUTs:

No interoperability issues were identified during testing. All observed behavior was consistent with the supported LoRaWAN 1.0.3 Class A feature set.

General Recommendations:

No recommendations. Interoperability between the device and the ThingPark network server was stable under the tested configuration.

Additional Comments:

Class B and Class C tests were not applicable because the device supports LoRaWAN Class A operation only.

Test Sign-Off

Test Engineer Name: Chenyang Zhai

Signature: 

Date:Nov 4, 2026.