



# LoRaWAN® End-Device and Network Server Interoperability Test Report Template

## Project Information

Batch End Device: **IKOM MCO LRwMB**

Date of Report: **July 26, 2026.**

Test Engineer: **Robert Pavleka**

Organization: **IKOM d.d.**

Interoperability Test Plan Version: **1.1.1**

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

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

Network Server Make/Model: **LORIENT Network Server v8.9.1**

Gateway Make/Model: **Milesight SG50**

Application Server Make/Model: **IKOM Data Manager**

Join Server Make/Model: **LORIENT Network Server v8.9.1**

## Device Under Test (DUT) Summary

| DUT ID | DUT Make/Model | Act Modes (OTAA/ABP) | DUT Configuration Notes                | Comments                           |
|--------|----------------|----------------------|----------------------------------------|------------------------------------|
| 1      | IKOM MCO LRwMB | 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. | Multiple OTAA Join scenarios were successfully verified using the Lorient Network Server. |
| DUT-1  | 3.2.3     | Uplink Transmission                           | PASS                       | Confirmed uplink received by the Network Server and successfully forwarded to the Application Server.                                                                                                         | Uplink payload processed successfully without packet loss or protocol errors.             |



|       |       |                       |      |                                                                                                                                     |                                                                             |
|-------|-------|-----------------------|------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| DUT-1 | 3.2.4 | Downlink Transmission | PASS | Downlink transmitted by the Network Server and successfully received by the End Device. Device responded correctly to MAC commands. | Successful bidirectional communication verified using LoRaWAN MAC commands. |
| 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 IKOM MCO LRwMB (LoRaWAN 1.0.2 Class A) successfully completed all applicable interoperability tests using the Lorient Network Server. Successful OTAA and ABP activation, repeated OTAA Join procedures, uplink and downlink communication, and LoRaWAN MAC command exchange were verified. 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 1.0.2 Class A feature set.

### General Recommendations:

No recommendations. The device demonstrated stable interoperability with the Lorient Network Server under the tested configuration.

### Additional Comments:

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

## Test Sign-Off

Test Engineer Name: **Robert Pavleka**

Signature: 

Date: July 26, 2026.