

EMF TEST REPORT

Test Report No.	: OT-24O-RWD-046
Reception No.	: 2409003016
Applicant	: M2cloud Inc
Address	: 422-ho, A-dong, Tera Tower 167, Songpa-daero, Songpa-gu, Seoul, South Korea
Manufacturer	: M2cloud Inc
Address	: 422-ho, A-dong, Tera Tower 167, Songpa-daero, Songpa-gu, Seoul, South Korea
Type of Equipment	: LogTrack BLE
FCC ID.	: 2BLSJ-LOGTRACK-BLE
Model Name	: m2sn203D
Multiple Model Name	: m2sn203A
Serial number	: N/A
Total page of Report	: 6 pages (including this page)
Date of Incoming	: October 04, 2024
Date of issue	: October 25, 2024

SUMMARY

The equipment complies with the regulation; FCC CFR 47 PART 2.1093

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

This report is not correlated with the "KS Q ISO/IEC 17025 and KOLAS accreditation" of Korean Laboratory Accreditation Scheme.

Mand

Approved by Jae-Ho, Lee / Chief Engineer ONETECH Corp.

Yun-Bok, Wi / Engineer ONETECH Corp.

Tested by

Reviewed by Tae-Ho, Kim / Chief Engineer ONETECH Corp.

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OTC-TRF-RF-001(0)

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Revision History

Rev. No.	Issue Report No.	Issued Date	Issued Date Revisions	
0	OT-24O-RWD-046	October 25, 2024	Initial Release	All



1. VERIFICATION OF COMPLIANCE

Applicant : M2cloud Inc

Address : 422-ho, A-dong, Tera Tower 167, Songpa-daero, Songpa-gu, Seoul, South Korea

Contact Person: YUN GON MOON / Director

Telephone No. : +82-70-5224-1875

FCC ID : 2BLSJ-LOGTRACK-BLE

Model Name : m2sn203D

Brand Name : -

Serial Number : N/A

Date : October 25, 2024

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM		
E.U.T. DESCRIPTION	LogTrack BLE		
THIS REPORT CONCERNS	Original Grant		
MEASUREMENT PROCEDURES	KDB 447498 D01 General RF Exposure Guidance v06		
TYPE OF EQUIPMENT TESTED	Pre-Production		
KIND OF EQUIPMENT			
AUTHORIZATION REQUESTED	Certification		
Modifications on the Equipment to Achieve			
Compliance	None		

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.



2. GENERAL INFORMATION

2.1 Product Description

The M2cloud Inc, Model m2sn203D (referred to as the EUT in this report) is a LogTrack BLE. The product specification described herein was obtained from product data sheet or user's manual.

Device Type	LogTrack BLE		
Temperature Range	-20 °C ~ +70 °C		
Operating Frequency	2 402 MHz ~ 2 480 MHz		
MAX. RF OUTPUT POWER	Bluetooth LE	-5.42 dBm	
Number of Channel	Bluetooth LE	40 Channels	
Modulation Type	Bluetooth LE	GFSK	
Antenna Type	PCB Antenna		
Antenna Gain	1.70 dBi		
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	32.768 kHz, 32 MHz		
Rated Supply Voltage	DC 3.0 V		

2.2 Alternative type(s)/model(s); also covered by this test report.

-. The following lists consist of the added model and their differences.

Model Name	Differences	Tested
m2sn203D	Basic Model	V
	The only difference is the circuit that reads the temperature sensor.	
m2sn203A	m2sn203D reads temperature data by I2C bus.	
	m2sn203A reads the temperature sensor directly from the RTD reader and calculates it.	

Note: 1. Applicant consigns only basic model to test. Therefore this test report just guarantees the units, which have been tested.

2. The Applicant/manufacturer is responsible for the compliance of all variants.

3. EUT MODIFICATIONS

-. None



4. RF EXPOSURE EVALUATION

4.1 RF Exposure Calculation

According to the FCC rule §4.3. General SAR test exclusion guidance, the limit for 1-g and 10-g SAR test exclusion thresholds are ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR by the device operating 100 MHz to 6 GHz and test separation distances ≤ 50 mm

4.2 EUT Description

Kind of EUT	LogTrack BLE				
	■ Portable (< 20 cm separation)				
Device Category	\Box Mobile (> 20 cm separation)				
	□ Others				
-	■ MPE				
Exposure	□ SAR Exclusion				
Evaluation Applied	□ N/A				

4.3 Test Result

Operating Mode	Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune-up Power (dBm)	Antenna Gain (dBi)	Max tune-up Power (dBm)	Max tune-up Power (mW)	Separation Distance (mm)	RF Exposure (W/kg)
Bluetooth LE	2 480.00	-5.42 ± 1.0	-4.42	1.70	-2.72	0.53	5	0.168

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

[(Max. Power of channel, including tune-up tolerance, mW)/(Min. test separation distance, mm)] X [$\sqrt{f(GHz)}$] < 3.0 = [(0.53/5)] X $\sqrt{2.480} = 0.168$