

# **EMF TEST REPORT**

Test Report No. : OT-210-RWD-058

**Reception No.** : 2110004416

Applicant : Remote Solution Co.,Ltd.

Address : 92, Chogokri Nammyun, Kimchon City, Kyungbuk, 740-871, South Korea

Manufacturer : Remote Solution Co.,Ltd.

Address : 92, Chogokri Nammyun, Kimchon City, Kyungbuk, 740-871, South Korea

Type of Equipment : BLE/RF4CE Remote controller

FCC ID. : TX4RD68A

Model Name : RD68A00

Multiple Model Name: RD68XYY (X: A~Z, YY: 00~99)

Serial number : N/A

Total page of Report : 8 pages (including this page)

Date of Incoming : October 07, 2021

Date of issue : October 28, 2021

#### **SUMMARY**

The equipment complies with the regulation; FCC PART 15 SUBPART C Section 15.247

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.

オナゼ

/ Su-Min You / Assistant Manager

Tested by

ONETECH Corp.

Reviewed by

/ Tae-Ho, Kim / Senior Manager

ONETECH Corp.

Approved by

/ Ki-Hong, Nam / General Manager

公八喜

Report No.: OT-21O-RWD-058

ONETECH Corp.

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OTC-TRF-RF-001(0)





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**Revision History** 

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-21O-RWD-058	October 28, 2021	Initial Release	All



## 1. VERIFICATION OF COMPLIANCE

Applicant : Remote Solution Co.,Ltd.

Address : 92, Chogokri Nammyun, Kimchon City, Kyungbuk, 740-871, South Korea

Contact Person: Byung-Cheol Kim / Manager

Telephone No. : +82-54-420-4517

FCC ID : TX4RD68A Model Name : RD68A00 Brand Name : RS OTS

Serial Number : N/A

Date : October 28, 2021

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM
E.U.T. DESCRIPTION	BLE/RF4CE Remote controller
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2020
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT	
AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED	FCC PART 15 SUBPART C Section 15.247
UNDER FCC RULES PART(S)	KDB 558074 D01 15.247 Meas Guidance v05r02
Modifications on the Equipment to	No.
Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

<sup>-.</sup> 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.

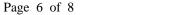


## 2. GENERAL INFORMATION

## 2.1 Product Description

The Remote Solution Co.,Ltd., Model RD68A00 (referred to as the EUT in this report) is a BLE/RF4CE Remote controller. The product specification described herein was obtained from product data sheet or user's manual.

Device Type	BLE/RF4CE Remote controller		
0 F	Bluetooth LE	2 402 MHz ~ 2 480 MHz	
Operating Frequency	Zigbee	2 405 MHz ~ 2 475 MHz	
DE O 4 - 4 D	Bluetooth LE	5.58 dBm	
RF Output Power	Zigbee	5.68 dBm	
N. and an a C. Channell	Bluetooth LE	40 Channels	
Number of Channel	Zigbee	15 Channels	
N 11 T	Bluetooth LE GFSK		
Modulation Type	Zigbee DSSS		
Antenna Type	PCB Antenna		
Antenna Gain	-1.0 dBi		
Rated Supply Voltage	DC 3.0 V		
List of each Osc. or crystal			
Freq.(Freq. $>= 1 \text{ MHz}$ ) $32 \text{ MHz}$			





## 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
RD68A00	Basic Model	V
RD68XYY	This model is identical to the basic model except that the printed information	]
(See Note 3)	(Label, Front cover and Brand) on the appearance is different.	

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. Multiple model name RD68XYY is made up of a combination of X (A~Z) and Y (00~99),

X depends on electric parts, YY depends on appearance, design and brand

#### 3. EUT MODIFICATIONS

-. None





# 4. RF Exposure Evaluation

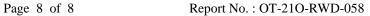
#### 4.1 Standard Applicable

According to 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to the procedure, KDB 447498 D06, the standalone SAR test exclusion threshold is [(Max. Power of channel, including tune-up tolerance, mW)/(Min. test separation distance, mm)]  $X [\sqrt{f(GHz)}] < 3$ 

#### **4.2 EUT Description**

Kind of EUT	BLE/RF4CE Remote controller			
	■ Portable (< 20 cm separation)			
Device Category	☐ Mobile (> 20 cm separation)			
	□ Others			
	□ MPE			
Exposure	□ SAR			
Evaluation Applied	■ SAR Exemption			





#### 4.3 Test Result of SAR Exclusion for Portable Devices

[(Max. Power of channel, including tune-up tolerance, mW)/(Min. test separation distance, mm)] X [  $\sqrt{f(GHz)}$ ] = (4.55/5) X  $\sqrt{2.44}$  = 1.42 < 3

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

4.3.1 Test data for Zigbee

Frequency (MHz)	Target Power W/tolerance	Max tune up power	Max tune up power	Separation distance	RF exposure
(WITIZ)	(dBm)	(dBm)	(mW)	(mm)	
2 440.00	$5.68 \pm 0.5$	6.18	4.15	5	1.30

#### 4.3.2 Test data for Bluetooth LE

Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
2 440.00	$5.58 \pm 0.5$	6.08	4.06	5	1.27