

# ELECTROMAGNETIC EMISSION COMPLIANCE REPORT FOR LOW-POWER, NON-LICENSED TRANSMITTER

**Test Report No.** : W17NR-D023  
**AGR No.** : A17OA-041R1  
**Applicant** : DSGLOBAL CO., LTD.  
**Address** : 107, Gasan digital 2-ro, Geumcheon-gu, Seoul, 08505, South Korea  
**Manufacturer** : DSGLOBAL CO., LTD.  
**Address** : 107, Gasan digital 2-ro, Geumcheon-gu, Seoul, 08505, South Korea  
**Type of Equipment** : Bluetooth Receiver  
**FCC ID.** : 2AJJ9-BR100  
**Model Name** : BR-100  
**Serial number** : N/A  
**Total page of Report** : 6 pages (including this page)  
**Date of Incoming** : October 15, 2017  
**Date of issue** : November 10, 2017

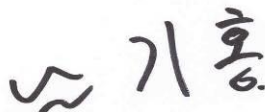
## SUMMARY

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.

Reviewed by:



Ki-Hong, Nam / Asst, Chief Engineer  
ONETECH Corp.

Approved by:



Keun-Young, Choi / Vice President  
ONETECH Corp.

## CONTENTS

**PAGE**

<b>1. VERIFICATION OF COMPLIANCE .....</b>	<b>4</b>
<b>2. GENERAL INFORMATION .....</b>	<b>5</b>
<b>2.1 PRODUCT DESCRIPTION.....</b>	<b>5</b>
<b>2.2 ALTERNATIVE TYPE(S)/MODEL(S); ALSO COVERED BY THIS TEST REPORT.....</b>	<b>5</b>
<b>3. EUT MODIFICATIONS.....</b>	<b>5</b>
<b>4. MAXIMUM PERMISSIBLE EXPOSURE .....</b>	<b>6</b>
<b>4.1 RF EXPOSURE LIMIT .....</b>	<b>6</b>
<b>4.2 EUT DESCRIPTION.....</b>	<b>6</b>
<b>4.3 TEST RESULT .....</b>	<b>6</b>

### Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
W17NR-D023	November 10, 2017	Initial Issue	All

## 1. VERIFICATION OF COMPLIANCE

Applicant : DSGLOBAL CO., LTD.  
 Address : 107, Gasan digital 2-ro, Geumcheon-gu, Seoul, 08505, South Korea  
 Contact Person : In Jong, Na / R&D Hardware Engineer  
 Telephone No. : +82-2-6959-0577  
 FCC ID : 2AJJ9-BR100  
 Model Name : BR-100  
 Serial Number : N/A  
 Date : November 10, 2017

EQUIPMENT CLASS	DSS – PART 15 SPREAD SPECTRUM TRANSMITTER
E.U.T. DESCRIPTION	Modular Transmitter, Bluetooth Receiver
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.247
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

-. 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 DSGLOBAL CO., LTD., Model BR-100 (referred to as the EUT in this report) is a Bluetooth Receiver. Product specification information described herein was obtained from product data sheet or user's manual.

Device Type	Bluetooth Receiver	
Operating Frequency	2 402 MHz ~ 2 480 MHz	
RF Output Power	1 Mbps	4.21 dBm
	2 Mbps	2.72 dBm
	3 Mbps	2.91 dBm
Number of Channel	79 Channel	
Modulation Type	GFSK for 1 Mbps, $\pi/4$ -DQPSK for 2 Mbps, 8-DPSK for 3 Mbps	
Antenna Type	Press Antenna	
Antenna Gain	1.245 dBi	
List of each Osc. or crystal Freq.(Freq. $\geq$ 1 MHz)	26 MHz	

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

-. None

## 3. EUT MODIFICATIONS

-. None

## 4. MAXIMUM PERMISSIBLE EXPOSURE

### 4.1 RF Exposure Limit

According to the FCC rule §1.1310 the limit for General Population/Uncontrolled exposure is 1 mW/cm<sup>2</sup> for the device operating 1 500 ~ 100 000 MHz.

### 4.2 EUT Description

Kind of EUT	Bluetooth Receiver
Operating Frequency Band	<input type="checkbox"/> Wireless Microphone: 494.000 MHz ~ 501.000 MHz and 498.200 MHz ~ 505.200 MHz <input type="checkbox"/> WLAN: 2 412 MHz ~ 2 462 MHz <input type="checkbox"/> WLAN: 5 180 MHz ~ 5 320 MHz / 5 500 MHz ~ 5 700 MHz <input type="checkbox"/> WLAN: 5 745 MHz ~ 5 825 MHz <input checked="" type="checkbox"/> Bluetooth: 2 402 MHz ~ 2 480 MHz <input type="checkbox"/> Zigbee: 2 405 MHz ~ 2 480 MHz
Device Category	<input checked="" type="checkbox"/> Portable (< 20 cm separation) <input type="checkbox"/> Mobile (> 20 cm separation) <input type="checkbox"/> Others
Max. Output Power	1 Mbps: 4.21 dBm (2.63 mW) 2 Mbps: 2.72 dBm (1.87 mW) 3 Mbps: 2.91 dBm (1.95 mW)
Used Antenna	Press Antenna
Used Antenna Gain	1.245 dBi
Exposure Evaluation Applied	<input type="checkbox"/> MPE <input type="checkbox"/> SAR <input checked="" type="checkbox"/> N/A

### 4.3 Test Result

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

$$[(\text{Max. Power of channel, including tune-up tolerance, mW})/(\text{Min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

$$= [2.63/5] \times \sqrt{2.402} = 0.815$$

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



Tested by: Tae-Ho, Kim / Manager