

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

**Test Report No.** : OT-196-RWD-053  
**AGR No.** : A18DA-184  
**Applicant** : INNOPRESSO, Inc.  
**Address** : 3dong 406ho 20, Pangyo-ro 289beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do,  
Republic of Korea  
**Manufacturer** : INNOPRESSO, Inc.  
**Address** : 3dong 406ho 20, Pangyo-ro 289beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do,  
Republic of Korea  
**Type of Equipment** : Wireless Keyboard  
**FCC ID.** : 2ATQS-MKB316  
**Model Name** : MKB316  
**Multiple Model Name** : N/A  
**Serial number** : N/A  
**Total page of Report** : 7 pages (including this page)  
**Date of Incoming** : December 17, 2019  
**Date of issue** : June 20, 2019

## 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:



Ha-Ram Lee / Assistant Manager  
ONETECH Corp.

Approved by:



Jae-Ho Lee / Chief Engineer  
ONETECH Corp.

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### Revision History

| Rev. No. | Issue Report No. | Issued Date   | Revisions     | Section Affected |
|----------|------------------|---------------|---------------|------------------|
| 0        | OT-196-RWD-053   | June 20, 2019 | Initial Issue | All              |
|          |                  |               |               |                  |
|          |                  |               |               |                  |

## 1. VERIFICATION OF COMPLIANCE

Applicant : INNOPRESSO, Inc.  
Address : 3dong 406ho 20, Pangyo-ro 289beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea  
Contact Person : Eunhyung Cho / CEO  
Telephone No. : +82-10-3260-1213  
FCC ID : 2ATQS-MKB316  
Model Name : MKB316  
Serial Number : N/A  
Date : June 20, 2019

|                                                         |                                      |
|---------------------------------------------------------|--------------------------------------|
| EQUIPMENT CLASS                                         | DTS – DIGITAL TRNSMISSION SYSTEM     |
| KIND OF EQUIPMENT                                       | Wireless Keyboard                    |
| THIS REPORT CONCERNS                                    | Original Grant                       |
| MEASUREMENT PROCEDURES                                  | ANSI C63.10: 2013                    |
| TYPE OF EQUIPMENT TESTED                                | Pre-Production                       |
| KIND OF EQUIPMENT<br>AUTHORIZATION REQUESTED            | Certification                        |
| EQUIPMENT WILL BE OPERATED<br>UNDER FCC RULES PART(S)   | FCC PART 15 SUBPART C Section 15.247 |
| Modifications on the Equipment to Achieve<br>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 INNOPRESSO, Inc., Model MKB316 (referred to as the EUT in this report) is a Wireless Keyboard. The product specification described herein was obtained from product data sheet or user's manual.

|                                                       |                       |
|-------------------------------------------------------|-----------------------|
| Device Type                                           | Wireless Keyboard     |
| Operating Frequency                                   | 2 402 MHz ~ 2 480 MHz |
| RF Output Power                                       | -1.78 dBm             |
| Number of Channel                                     | 40 Channel            |
| Modulation Type                                       | GFSK                  |
| Antenna Type                                          | PCB Pattern Antenna   |
| Antenna Gain                                          | -1.98 dBi             |
| List of each Osc. or crystal<br>Freq.(Freq. >= 1 MHz) | 32 MHz                |
| Rated Supply Voltage                                  | DC 3.7 V              |

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

-. None

## 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 D01, the standalone SAR test exclusion threshold is

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

### 4.2 EUT Description

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kind of EUT                    | Wireless Keyboard                                                                                                                                                                                                                                                                                                                                                                                                         |
| Operating Frequency Band       | <input type="checkbox"/> Wireless Microphone: 494.000 MHz ~ 501.000 MHz<br>and 498.200 MHz ~ 505.200 MHz<br><input type="checkbox"/> WLAN: 2 412 MHz ~ 2 462 MHz<br><input type="checkbox"/> WLAN: 5 180 MHz ~ 5 240 MHz<br><input type="checkbox"/> WLAN: 5 745 MHz ~ 5 825 MHz<br><input type="checkbox"/> Bluetooth: 2 402 MHz ~ 2 480 MHz<br><input checked="" type="checkbox"/> Bluetooth BLE: 2 402 MHz ~ 2 480 MHz |
| MAX. RF OUTPUT POWER           | -1.78 dBm                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Antenna Gain                   | -1.98 dBi                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Exposure<br>Evaluation Applied | <input type="checkbox"/> MPE<br><input type="checkbox"/> SAR<br><input checked="" type="checkbox"/> SAR Test Exclusion Evaluation                                                                                                                                                                                                                                                                                         |

### 4.3 Test Result of SAR Exclusion

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

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

$$= (0.74/5) \times \sqrt{2.480} = 0.23 < 3$$

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

| Frequency<br>(MHz) | Target Power<br>W/tolerance<br>(dBm) | Max tune up<br>power<br>(dBm) | Max tune up<br>power<br>(mW) | Separation<br>distance<br>(mm) | RF exposure |
|--------------------|--------------------------------------|-------------------------------|------------------------------|--------------------------------|-------------|
| 2 480              | -1.78 ± 0.5                          | -1.28                         | 0.74                         | 5                              | 0.23        |



Tested by: Yu-Seog Sim / Assistant Manager