

# MPE TEST REPORT

Report No.: SHE22110068-02DE

Date: 2022-11-25

Page 1 of 6

**Applicant** : Keeson Technology Corporation Limited  
**Address of Applicant** : No. 195, Yuanfeng East Road, Wangjiangjing, Xiuzhou District, Jiaxing City, 314000, China

**Product Name** : CONTROL BOX  
**Model No.** : LSC01  
**Sample acquisition Method** : Sent by client  
**Sample No.** : E22110068-02#03

**FCC ID** : 2AK23-LSC01

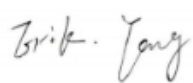
**Standard** : FCC Part 2.1091

**Date of Receipt** : 2022-11-18  
**Date of Test** : 2022-11-23 ~ 2022-11-25  
**Date of Issue** : 2022-11-25

## Remark:

*This report details the results of the testing carried out on one sample, the results contained in this report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.*

Prepared by:



(Erik Yang)

Reviewed by:



(Jennifer Zhou)

Approved by:



(Authorized signatory: Guoyou Chi)

# MPE TEST REPORT

Report No.: SHE22110068-02DE

Date: 2022-11-25

Page 2 of 6

## Contents

|          |                                                |          |
|----------|------------------------------------------------|----------|
| <b>1</b> | <b>GENERAL INFORMATION .....</b>               | <b>3</b> |
| 1.1      | TESTING LABORATORY .....                       | 3        |
| 1.2      | ENVIRONMENTAL CONDITIONS .....                 | 3        |
| 1.3      | DETAILS OF APPLICATION .....                   | 3        |
| 1.4      | DETAILS OF EUT .....                           | 3        |
| <b>2</b> | <b>MAXIMUM PERMISSIBLE EXPOSURE (MPE).....</b> | <b>4</b> |
| 2.1      | LIMITS .....                                   | 4        |
| 2.2      | ASSESSMENT METHODS .....                       | 4        |
| 2.3      | TEST RESULT .....                              | 5        |
| 2.4      | CONCLUSION .....                               | 5        |
| <b>3</b> | <b>APPENDIXES .....</b>                        | <b>6</b> |
| 3.1      | SAMPLE PHOTOGRAPH.....                         | 6        |

# MPE TEST REPORT

Report No.: SHE22110068-02DE

Date: 2022-11-25

Page 3 of 6

## 1 General Information

### 1.1 Testing Laboratory

|              |                                                         |
|--------------|---------------------------------------------------------|
| Company Name | ICAS Testing Technology Service (Shanghai) Co., Ltd.    |
| Address      | No.1298, Pingan Road, Minhang District, Shanghai, China |
| Telephone    | 0086 21-51682999                                        |
| Fax          | 0086 21-54711112                                        |
| Homepage     | www.icasiso.com                                         |

### 1.2 Environmental conditions

|                                   |          |
|-----------------------------------|----------|
| Temperature (°C)                  | 18-25    |
| Humidity (%RH)                    | 40-65    |
| Barometric Pressure (mbar)        | 960-1060 |
| Ambient noise & Reflection (W/kg) | < 0.012  |

### 1.3 Details of Application

|                           |                                                                                                                    |
|---------------------------|--------------------------------------------------------------------------------------------------------------------|
| Applicant Company Name    | Keeson Technology Corporation Limited                                                                              |
| Address                   | No. 195, Yuanfeng East Road, Wangjiangjing, Xiuzhou District, Jiaxing City, 314000, China                          |
| Contact Person            | Sam xu                                                                                                             |
| Telephone                 | 18279170755                                                                                                        |
| Email                     | xuwb@keeson.com                                                                                                    |
| Manufacturer Company Name | DewertOkin Technology Group Co., Ltd.                                                                              |
| Address                   | No.465, Xinnanyang Road, Wangjiangjing Development Zone, Xiuzhou District, Jiaxing City, Zhejiang Province, China. |
| Factory Company Name      | DewertOkin Technology Group Co., Ltd.                                                                              |
| Address                   | No.465, Xinnanyang Road, Wangjiangjing Development Zone, Xiuzhou District, Jiaxing City, Zhejiang Province, China. |

### 1.4 Details of EUT

|                  |                   |
|------------------|-------------------|
| Product Name     | CONTROL BOX       |
| Brand Name       | N/A               |
| Test Model No.   | LSC01             |
| FCC ID           | 2AK23-LSC01       |
| Frequency Range  | 2403MHz ~ 2480MHz |
| Modulation Type  | GFSK              |
| Antenna Type     | PCB Antenna       |
| Antenna Gain     | 1.225dBi          |
| Hardware version | R5.109.00.871D    |

# MPE TEST REPORT

Report No.: SHE22110068-02DE

Date: 2022-11-25

Page 4 of 6

|                  |      |
|------------------|------|
| Software version | V1.0 |
|------------------|------|

## 2 Maximum Permissible Exposure (MPE)

### 2.1 Limits

According to FCC Part 1.1307, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the commission's guidelines.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| Frequency range (MHz)                                          | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|----------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| <b>(A) Limits for Occupational/Controlled Exposure</b>         |                               |                               |                                     |                          |
| 0.3-3.0                                                        | 614                           | 1.63                          | *100                                | 6                        |
| 3.0-30                                                         | 1842/f                        | 4.89/f                        | *900/f <sup>2</sup>                 | 6                        |
| 30-300                                                         | 61.4                          | 0.163                         | 1.0                                 | 6                        |
| 300-1,500                                                      |                               |                               | f/300                               | 6                        |
| 1,500-100,000                                                  |                               |                               | 5                                   | 6                        |
| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                               |                               |                                     |                          |
| 0.3-1.34                                                       | 614                           | 1.63                          | *100                                | 30                       |
| 1.34-30                                                        | 824/f                         | 2.19/f                        | *180/f <sup>2</sup>                 | 30                       |
| 30-300                                                         | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300-1,500                                                      |                               |                               | f/1500                              | 30                       |
| 1,500-100,000                                                  |                               |                               | 1.0                                 | 30                       |

f = frequency in MHz \* = Plane-wave equivalent power density

### 2.2 Assessment methods

Calculation Formula from FCC OET 65:

$$S = \frac{P * G}{4 * \pi * R^2}$$

Where:

S = Power Density (mW/cm<sup>2</sup>)

P = Input Power of the Antenna (mW)

G = Antenna Gain Relative to an Isotropic Antenna

R = Distance from the Antenna to the Point of Investigation (cm)

# MPE TEST REPORT

Report No.: SHE22110068-02DE

Date: 2022-11-25

Page 5 of 6

## 2.3 Test Result

| Operation Mode | Frequency Range (MHz) | Max Conducted Power (dBm) | Antenna Gain (dBi) | Max EIRP (mW) | Power Density at R = 20 cm (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) |
|----------------|-----------------------|---------------------------|--------------------|---------------|--------------------------------------------------|-----------------------------|
| GFSK           | 2403~ 2480            | -2.30                     | 1.225              | 0.78          | 0.000155                                         | 1.0                         |

### Note(s):

1. For 300 – 1,500MHz: Power Density limit is  $f/1500$  mW/cm<sup>2</sup>
2. For 1,500 – 100,000MHz: Power Density limit is 1.0 mW/cm<sup>2</sup>

## 2.4 Conclusion

The Power Density at the position which is 20 cm far from the EUT is smaller than the General Population/Uncontrolled Exposure limit.

# MPE TEST REPORT

Report No.: SHE22110068-02DE

Date: 2022-11-25

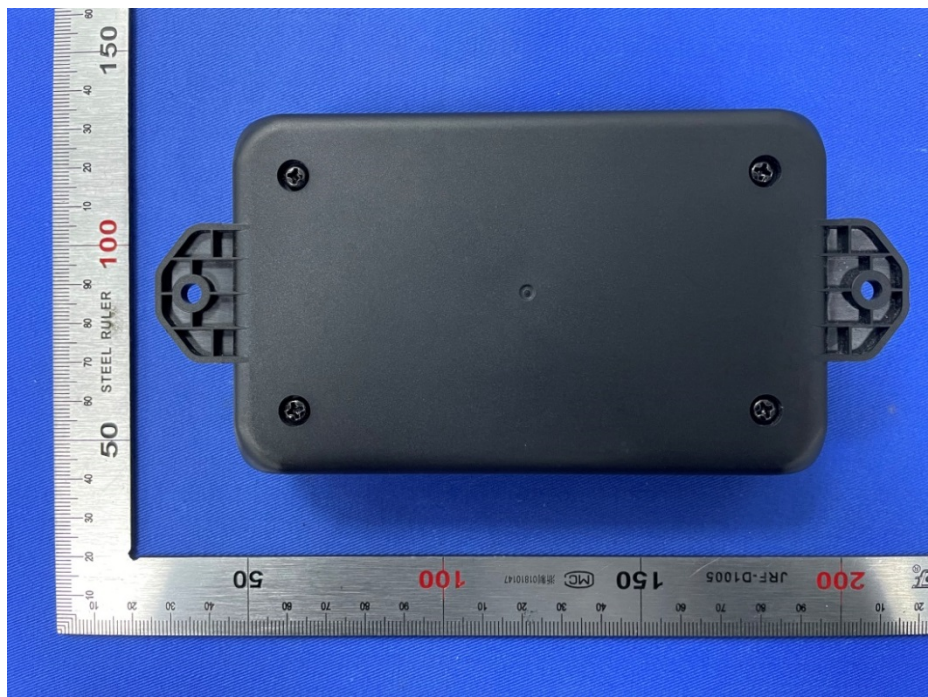
Page 6 of 6

## 3 Appendixes

### 3.1 Sample Photograph



Front of the sample



Rear of the sample

\*\*\*End of the report\*\*\*