

Tongchuang Haicheng (Taizhou) Electric Co., Ltd

SAR COMPLIANCE REPORT

Report Type:
FCC SAR assessment report

Model:
HA-DTT-01, HA-DTT-01yf

REPORT NUMBER:
2411B1167SHA-002

ISSUE DATE:
January 02, 2025

DOCUMENT CONTROL NUMBER:
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Factory: **Tongchuang Haicheng(Taizhou) Electric Co., Ltd**
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FCC ID: **2BMF9-DTT01**

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

447498 D04 General RF Exposure Guidance v01
FCC Part2.1093 FCC Part1.1307(b)

PREPARED BY:
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Project Engineer
Justin Wu**REVIEWED BY:**

Reviewer
Wakeyou Wang

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TEST REPORT**Revision History**

| Report No. | Version | Description | Issued Date |
|-------------------|----------------|-------------------------|--------------------|
| 2411B1167SHA-002 | Rev. 01 | Initial issue of report | January 02, 2025 |
| | | | |
| | | | |

TEST REPORT**1 GENERAL INFORMATION****1.1 Description of Equipment Under Test (EUT)**

| | |
|-----------------------|--|
| Product Name: | Vent Sensor Trigger Smart Chip |
| Model: | HA-DTT-01, HA-DTT-01yf |
| Description of EUT: | The product is a transmitter. It works at 433.92MHz Frequency. There are two models, they are same except the different interface threads. We test HA-DTT-01 and list the result in this report. |
| Rating: | 3Vdc |
| Category of EUT: | Class B |
| EUT type: | <input checked="" type="checkbox"/> Table top <input type="checkbox"/> Floor standing |
| Software Version: | / |
| Hardware Version: | / |
| Sample number: | A241117-51 |
| Sample received date: | November 17, 2024 |
| Date of test: | November 19, 2024 to December 11, 2024 |

1.2 Technical Specification

| | |
|----------------------|--|
| Operation Frequency: | 433.92MHz |
| Type of Modulation: | ASK |
| Product Type: | <input type="checkbox"/> Mobile <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Fix Location |
| Channel Number: | 1 |
| Antenna Designation: | Wire antenna |

TEST REPORT**1.3 Description of Test Facility**

| | |
|------------|--|
| Name: | Intertek Testing Services (Shanghai FTZ) Co., Ltd. |
| Address: | Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China |
| Telephone: | 86 21 61278200 |
| Telefax: | 86 21 54262353 |

| | |
|---|---|
| The test facility is recognized, certified, or accredited by these organizations: | CNAS Accreditation Lab Registration No. CNAS L21189 |
| | FCC Accredited Lab Designation Number: CN0175 |
| | IC Registration Lab CAB identifier.: CN0014 |
| | VCCI Registration Lab Registration No.: R-14243, G-10845, C-14723, T-12252 |
| | A2LA Accreditation Lab Certificate Number: 3309.02 |

TEST REPORT

2 SAR Assessment

Test result: Pass

2.1 SAR Test Exclusion Limit

This method shall only be used at separation distances up to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula below:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

f is in GHz, d is the separation distance (cm), and ERP_{20cm} is per Formula above.

The example values shown in below are for illustration only.

| Frequency (MHz) | Distance (mm) | | | | | | | | | | |
|-----------------|---------------|----|----|-----|-----|-----|-----|-----|-----|-----|--|
| | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | |
| 300 | 39 | 65 | 88 | 110 | 129 | 148 | 166 | 184 | 201 | 217 | |
| 450 | 22 | 44 | 67 | 89 | 112 | 135 | 158 | 180 | 203 | 226 | |
| 835 | 9 | 25 | 44 | 66 | 90 | 116 | 145 | 175 | 207 | 240 | |
| 1900 | 3 | 12 | 26 | 44 | 66 | 92 | 122 | 157 | 195 | 236 | |
| 2450 | 3 | 10 | 22 | 38 | 59 | 83 | 111 | 143 | 179 | 219 | |
| 3600 | 2 | 8 | 18 | 32 | 49 | 71 | 96 | 125 | 158 | 195 | |
| 5800 | 1 | 6 | 14 | 25 | 40 | 58 | 80 | 106 | 136 | 169 | |

2.2 Assessment Results

As we can see from the test report 2411B1167SHA-001:

The highest EIRP adjusted with tune-up tolerance is: $66.2 - 95.3 = -29.1 \text{ dBm} = 0.001 \text{ mW}$
 $0.001 \text{ mW} < \underline{22 \text{ mW (Test Exclusion Thresholds of 450MHz at 5mm)}}.$ Therefore, the SAR requirement is deemed to be satisfied without test.

***** END *****