

EMF TEST REPORT

Test Report No. : OT-204-RWD-078

AGR No. : A201A-395

Applicant : PS TEC Co., Ltd.

Address : 80, HWANGGEUM 3-RO 7BEON-GIL, YANGCHON-EUP, GIMPO-SI,
GYEONGGI-DO, KOREA

Manufacturer : PS TEC Co., Ltd.

Address : 80, HWANGGEUM 3-RO 7BEON-GIL, YANGCHON-EUP, GIMPO-SI,
GYEONGGI-DO, KOREA

Type of Equipment : Autonomous Counter

FCC ID. : 2AVSN-PSM-NGC-P01

Model Name : PSM-NGC-P01

Multiple Model Name : N/A

Serial number : N/A

Total page of Report : 7 pages (including this page)

Date of Incoming : February 05, 2020

Date of issue : April 24, 2020

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 / Manager
ONETECH Corp.

Approved by:



Jae-Ho Lee / General Manager
ONETECH Corp.

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Revision History

| Rev. No. | Issue Report No. | Issued Date | Revisions | Section Affected |
|----------|------------------|----------------|---------------|------------------|
| 0 | OT-204-RWD-078 | April 24, 2020 | Initial Issue | All |
| | | | | |
| | | | | |

1. VERIFICATION OF COMPLIANCE

Applicant : PS TEC Co., Ltd.
 Address : 80, HWANGGEUM 3-RO 7BEON-GIL, YANGCHON-EUP, GIMPO-SI, GYEONGGI-DO, KOREA
 Contact Person : Bo Young Hwang/General Manager
 Telephone No. : +82-2-3408-1750
 FCC ID : 2AVSN-PSM-NGC-P01
 Model Name : PSM-NGC-P01
 Brand Name : N/A
 Serial Number : N/A
 Date : April 24, 2020

| | |
|--|--------------------------------------|
| EQUIPMENT CLASS | DTS – DIGITAL TRNSMISSION SYSTEM |
| E.U.T. DESCRIPTION | Autonomous Counter |
| 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 PS TEC Co., Ltd., Model PSM-NGC-P01 (referred to as the EUT in this report) is an Autonomous Counter. The product specification described herein was obtained from product data sheet or user's manual.

| | |
|--|-----------------------|
| DEVICE TYPE | Autonomous Counter |
| OPERATING FREQUENCY | 2 402 MHz ~ 2 480 MHz |
| RF OUTPUT POWER | -1.56 dBm |
| NUMBER OF CHANNEL | 40 Channels |
| MODULATION TYPE | GFSK(Bluetooth LE) |
| ANTENNA TYPE | Chip Antenna |
| ANTENNA GAIN | 2.31 dBi |
| LIST OF EACH OSC. OR CRYSTAL. FREQ.(FREQ.>=1 MHz) | 32 MHz |

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

-. None

3. EUT MODIFICATIONS

-. None

4. RF EXPOSURE EVALUATION

4.1 RF Exposure Calculation

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 | Autonomous Counter |
| Operating Frequency Band | <input type="checkbox"/> Bluetooth: 2 402 MHz ~ 2 480 MHz <input checked="" type="checkbox"/> Bluetooth LE: 2 402 MHz ~ 2 480 MHz |
| MAX. RF OUTPUT POWER | -1.56 dBm |
| Antenna Gain | 2.31 dBi |
| Exposure Evaluation Applied | <input type="checkbox"/> MPE <input type="checkbox"/> SAR <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

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

$$= (-1.06/5) \times \sqrt{2.402} = 0.24 < 3$$

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

| Mode | Frequency (MHz) | Target Power W/tolerance (dBm) | Max tune up power (dBm) | Max tune up power (mW) | Separation distance (mm) | RF exposure |
|--------------|-----------------|--------------------------------|-------------------------|------------------------|--------------------------|-------------|
| Bluetooth LE | 2 402 | -1.56 ± 0.5 | -1.06 | 0.78 | 5 | 0.24 |



Tested by: Youngyong Kim/ Assistant Manager