

EMF TEST REPORT

Test Report No. : OT-204-RWD-075

AGR No. : A201A-394

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-NP01

Model Name : PSM-NGC-NP01

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.

CONTENTS

PAGE

1. VERIFICATION OF COMPLIANCE	4
2. GENERAL INFORMATION	5
2.1 PRODUCT DESCRIPTION.....	5
2.2 ALTERNATIVE TYPE(S)/MODEL(S); ALSO COVERED BY THIS TEST REPORT.....	5
3. EUT MODIFICATIONS.....	5
4. MAXIMUM PERMISSIBLE EXPOSURE	6
4.1 RF EXPOSURE CALCULATION	6
4.2 EUT DESCRIPTION.....	6
4.3 TEST RESULT OF SAR EXCLUSION	7

Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-204-RWD-075	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-NP01
 Model Name : PSM-NGC-NP01
 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-NP01 (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	-1.94 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
Hardware / Software version	1.0 / 1.0

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 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	-1.94 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

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

$$= (-1.44/5) \times \sqrt{2.402} = 0.22 < 3$$

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	-1.94 ± 0.5	-1.44	0.72	5	0.22



Tested by: Youngyong Kim/ Assistant Manager