

RF exposure evaluation

FCC ID: 2ATJZ-47656025001

Product: Tire pressure monitoring system

Model No.: 47656025001

**Additional Model No.: 47656024001, BLEAPP-E, BLEAPP-I, TPCMU-EF,
TPCMU-IF, SP1-E, SP1-I, TPSF-E, TPSF-I, TPSC-E, TPSC-I**

Trade Mark: CAR CLUB TPMS SENSOR KIT, SUNWAYI, CAR GENERAL

Report No.: TCT190524E027

Issued Date: Jun. 04, 2019

Issued for:

Shenzhen Sunway Industry Co., Ltd

**The first, third and fourth floors. Bldg 17, Industry Zone 5, Shiyan Town,
Baoan District, Shenzhen, Guangdong, China.**

Issued By:

Shenzhen Tongce Testing Lab.

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1. Test Certification

Product:	Tire pressure monitoring system
Model No.:	47656025001
Additional Model No.:	47656024001, BLEAPP-E, BLEAPP-I, TPCMU-EF, TPCMU-IF, SP1-E, SP1-I, TPSF-E, TPSF-I, TPSC-E, TPSC-I
Trade Mark:	CAR CLUB TPMS SENSOR KIT, SUNWAYI, CAR GENERAL
Applicant:	Shenzhen Sunway Industry Co., Ltd
Address:	The first, third and fourth floors. Bldg 17, Industry Zone 5, Shiyan Town, Baoan District, Shenzhen, Guangdong, China.
Manufacturer:	Shenzhen Sunway Industry Co., Ltd
Address:	The first, third and fourth floors. Bldg 17, Industry Zone 5, Shiyan Town, Baoan District, Shenzhen, Guangdong, China.
Date of Test:	May 25, 2019 – Jun. 03, 2019

The above equipment has been tested by Shenzhen Tongce Testing Lab. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Tested By:



Brews Xu

Date:

Jun. 03, 2019

Reviewed By:



Beryl Zhao

Date:

Jun. 04, 2019

Approved By:



Tomsin

Date:

Jun. 04, 2019

2. EUT Description

Product:	Tire pressure monitoring system
Model No.:	47656025001
Additional Model No.:	47656024001, BLEAPP-E, BLEAPP-I, TPCMU-EF, TPCMU-IF, SP1-E, SP1-I, TPSF-E, TPSF-I, TPSC-E, TPSC-I
Trade Mark:	CAR CLUB TPMS SENSOR KIT, SUNWAYI, CAR GENERAL
Hardware Version:	TPMS01-REV03
Software Version:	TPMS01-REV03
Operation Frequency:	2402MHz~2480MHz
Modulation Technology:	GFSK
Antenna Type:	Internal Antenna
Antenna Gain:	0dBi
Power Supply:	DC 3.0V
Remark:	All models above are identical in interior structure, electrical circuits and components, and just model names are different for the marketing requirement.

3. General Information

3.1. Test environment and mode

Item	Normal condition
Temperature	+25°C
Voltage	DC 3.0V
Humidity	56%
Atmospheric Pressure:	1008 mbar
Test Mode:	
Bluetooth Mode:	Keep the EUT in transmitting mode with modulation.

3.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4. Test Results and Measurement Data

§2.1093 Radiofrequency radiation exposure evaluation: Portable Devices.

According to §15.247(i) and §1.1307b(1), 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 guidance.

The 1-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR, where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- When the minimum test separation distance is < 5 mm, a distance of 5 mm according is applied to determine SAR test exclusion.
- The result is rounded to one decimal place for comparison

Channel	Frequency (GHz)	Max. Power (dBm)	Tune up Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up Power (mW)	Test distance (mm)	Result	exclusion thresholds for 1-g SAR
CH 00	2.402	-0.97	-0.5 \pm 1	0.5	1.12	5	0.35	3.0

Result:

Base on the calculation value, No SAR measurement is required.

*******END OF REPORT*******