

TEST REPORT

FCC ID. :	2AFGF-S2
Test Report No..... :	TCT220805E032
Date of issue..... :	Aug. 15, 2022
Testing laboratory	SHENZHEN TONGCE TESTING LAB
Testing location/ address:	2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China
Applicant's name..... :	Shen Zhen PXN Electronics Technology Co., Ltd.
Address..... :	Fenghuanggang Xixiang, Baoan, Shenzhen, China
Manufacturer's name ... :	Guangdong Mingyang Smart Technology Co., Ltd
Address..... :	407, Block A, Hongdu Commercial Building, Shunhe Road, Bao'an District, Shenzhen, China
Standard(s)	KDB 447498 D01 General RF Exposure Guidance v06
Product Name..... :	True Wireless Gaming Earbuds
Trade Mark	N/A
Model/Type reference..... :	PXN Sense Elf S2, PXN S2, PXN-S2, Sense Elf S2, ELF S2, PXN Sense Elf S1, PXN S1, Sense Elf S1, TWS-S2
Rating(s)..... :	Rechargeable Li-ion Battery DC 3.7V
Date of receipt of test item	Aug. 05, 2022
Date (s) of performance of test..... :	Aug. 05, 2022 - Aug. 15, 2022
Tested by (+signature) ... :	Brews XU
Check by (+signature).... :	Beryl ZHAO
Approved by (+signature):	Tomsin

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1. General Product Information

1.1. EUT description

Product Name.....:	True Wireless Gaming Earbuds
Model/Type reference.....:	PXN Sense Elf S2
Sample Number.....:	TCT220805E015-0101
Operation Frequency	2402MHz~2480MHz
Modulation Type	For BT: GFSK, $\pi/4$ -DQPSK, 8DPSK For BLE: GFSK
Antenna Type.....:	FPC Antenna
Antenna Gain.....:	-0.63dBi
Rating(s).....:	Rechargeable Li-ion Battery DC 3.7V

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

No.	Model No.	Tested with
1	PXN Sense Elf S2	☒
Other models	PXN S2, PXN-S2, Sense Elf S2, ELF S2, PXN Sense Elf S1, PXN S1, Sense Elf S1, TWS-S2	☐

Note: PXN Sense Elf S2 is tested model, other models are derivative models. The models are identical in circuit and PCB layout, different on the model names. So the test data of PXN Sense Elf S2 can represent the remaining models.

2. General Information

2.1. Test environment and mode

Item	Normal condition
Temperature	+25°C
Voltage	DC 3.7V
Humidity	56%
Atmospheric Pressure:	1008 mbar
Test Mode:	
Engineering mode:	Keep the EUT in continuous transmitting by select channel

2.2. 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
/	/	/	/	/

3. Facilities and Accreditations

3.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been recognized by Innovation, Science and Economic Development Canada for radio equipment testing.

3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

4. Test Results and Measurement Data

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 ≤ 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

For BDR+EDR:

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 78	2.480	4.36	3.5 $\pm$ 1	4.5	2.82	5	0.89	3.0

For BLE 1M:

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 78	2.480	3.26	2.5 $\pm$ 1	3.5	2.24	5	0.71	3.0

For BLE 2M:

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 78	2.480	3.26	2.5 $\pm$ 1	3.5	2.24	5	0.71	3.0

Result:

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

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