



# RF EXPOSURE EVALUATION REPORT

**Applicant: Hua Sheng Telematics Co., Ltd.**

Address: Room 402, Building C, Zhao Ye Industrial Park, No.332 Da bu tou Road, Long Hua District, Shenzhen, China

**FCC ID: 2BAXXHS5000G**

**Product Name: OBD tracker**

**Model Number: HS-5000G**

**Standard(s): 47 CFR §1.1307**

The above equipment has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

**Report Number: CR230309656-00B**

**Date Of Issue: 2023/5/10**

**Reviewed By: Sun Zhong**

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Title: Manager

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## Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

## Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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## DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230309656-00B	Original Report	2023/5/10

## 1. RF EXPOSURE EVALUATION

### 1.1 Applicable Standard

According to §1.1307(b)(3)(i)

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold  $P_{th}$  (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive).  $P_{th}$  is given by:

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

Where

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

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

$d$  = the separation distance (cm);

### 1.2 EUT Information ▲:

Operation Modes	Operation Frequency (MHz)	Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP or EIRP	Limit (dBm)
GSM 850	824-849	31.99	0.64	30.48	38.45
GSM 1900	1850-1910	28.99	1.87	30.86	33
LTE B2	1850-1915	25.70	1.87	27.57	33
LTE B4	1710-1755	25.70	3.12	28.82	30
LTE B5	824-849	25.70	0.64	24.19	38.45
LTE B66	1710-1780	25.70	3.12	28.82	30

Note:

The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.

For GSM850 and GSM1900

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

The devices contain certified WWAN Module, FCC ID: 2AJYU-8BAE002.

**1.2 Measurement Result**

Radio	Frequency (MHz)	Distance (mm)	P <sub>th</sub> (mW)	Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	The Greater of Conducted Power or ERP		SAR-Based Exemption
						dBm	mW	
GSM850	824-849	200	1681	31.99	0.64	31.99	1581.25	Compliant
GSM1900	1850-1910	200	3060	28.99	1.87	28.99	792.5	Compliant
LTE B2	1850-1910	200	3060	25.7	1.87	25.7	371.54	Compliant
LTE B4	1710-1755	200	3060	25.7	3.12	26.67	464.52	Compliant
LTE B5	824-849	200	1681	25.7	0.64	25.7	371.54	Compliant
LTE B66	1710-1780	200	3060	25.7	3.12	26.67	464.52	Compliant

**Result: The device compliant the SAR-Based Exemption at 20cm distances**

===== END OF REPORT =====