



## Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240300045604

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### 1 Cover Page

## ***RF Exposure Evaluation Report***

**Application No.:** KSCR2403000456AT  
**FCC ID:** 2BF29GT573-LAAG35LA  
**Applicant:** GOSUNCNWELINK TECHNOLOGY CO.,LTD.  
**Address of Applicant:** ROOM 606, TOWER A, GONGXIANG BUILDING, NO.78 NORTH KEYUAN ROAD, NANSHAN DISTRICT, SHENZHEN,CHINA  
**Manufacturer:** Gosuncn Technology Group Co., Ltd.  
**Address of Manufacturer:** 6F, No. 2819, KaiChuang Avenue, Science City, Huangpu District, Guangzhou City, Guangdong Province, China  
**Factory:** DBG TECHNOLOGY CO., LTD  
**Address of Factory:** No.5, Yongda Road, Xiang Shui River Industrial Area, Daya Bay, Huizhou City, 516083 Guangdong, P. R. China  
**Equipment Under Test (EUT):**  
**EUT Name:** HARDWARE ASSY-TELEMATIC NODE  
**Model No.:** GT573-LA  
**Trade Mark:** GOSUNCN  
**Standard(s) :** FCC Rules 47 CFR §2.1091  
KDB 447498 D04 interim General RF Exposure Guidance v01  
RSS-102 Issue 5 Amendment 1 (February 2, 2021)  
**Date of Receipt:** 2024-03-18  
**Date of Test:** 2024-03-28 to 2024-04-10  
**Date of Issue:** 2024-04-12

<b>Test Result:</b>	<b>Pass*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.

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<i>Revision Record</i>			
<i>Version</i>	<i>Description</i>	<i>Date</i>	<i>Remark</i>
00	Original	2024-04-12	/

<b>Authorized for issue by:</b>			
<b>Tested By</b>		<i>Maker Qi</i>	
		<hr/> <b>Maker_Qi /Project Engineer</b>	
<b>Approved By</b>		<i>Terry Hou</i>	
		<hr/> <b>Terry Hou /Reviewer</b>	



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### 3 General Information

#### 3.1 General Description of E.U.T.

Power supply:	Voltage Range: 9V~16V, Rating: 12V 0.6A
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#### 3.2 Details of E.U.T.

##### 2G

Operation Frequency:	GSM850:TX:824-849MHz,RX:869-894MHz PCS1900:TX:1850-1910MHz,RX:1930-1990MHz
Modulation Type:	GSM/GPRS:GMSK EDGE(MCS 0-4):GMSK/(MCS5-9):8PSK
Antenna Type:	External Antenna
Antenna Gain:	GSM850:-1dBi (Provided by the manufacturer) PCS1900:1.5dBi (Provided by the manufacturer)

##### 3G

Operation Frequency:	Band 2:TX:1850 -1910 MHz RX:1930 - 1990 MHz Band 4:TX:1710 -1755MHz RX:2110 - 2155MHz Band 5:TX:824 - 849MHz RX:869 - 894MHz
Modulation Type:	BPSK/QPSK/16QAM(16QAM uplink is not supported)/64QAM
Antenna Type:	External Antenna
Antenna Gain:	Band 2:1.5dBi (Provided by the manufacturer) Band 4:1.5dBi (Provided by the manufacturer) Band 5:-1dBi (Provided by the manufacturer)

##### 4G

Operation Frequency:	Band 2:Uplink:1850 - 1910 MHz,Downlink:1930 - 1990 MHz Band 4:Uplink:1710 - 1755 MHz,Downlink:2110 - 2155 MHz Band 5:Uplink:824 - 849 MHz,Downlink:869 - 894 MHz Band 7:Uplink:2500-2570MHz,Downlink:2620-2690MHz
Modulation Type:	QPSK/16QAM/64QAM(Downlink only)
Antenna Type:	External Antenna
Antenna Gain:	Band 2:1.5dBi (Provided by the manufacturer) Band 4:1.5dBi (Provided by the manufacturer) Band 5:-1dBi (Provided by the manufacturer) Band 7:1.5dBi (Provided by the manufacturer)

### **3.3 Test Location**

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1.SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal frequency, antenna gain, cable loss, etc ) is provided by the applicant. (if applicable).

2.SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (if applicable).

3. Sample source: sent by customer.

### **3.4 Test Facility**

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

- **A2LA**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

- **FCC**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

- **ISED**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

- **VCCI**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

## 4 FCC Radiofrequency radiation exposure limits

According to §1.1310, The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part 1.1307(b)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
(i) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	<6
30-300	61.4	0.163	1.0	<6
300-1,500			f/300	<6
1,500-100,000			5	<6
(ii) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

## 5 Measurement and Calculation

### 5.1 Maximum transmit power

The Power Data is based on the RF Test Report FG932502A & FG291701

### 5.2 MPE Calculation

According to the formula  $S=P/4\pi R^2$ , we can calculate S which is MPE.

Note:

- 1) P (mW)
- 2) R = distance to the center of radiation of antenna (in centimeter)

For FCC

Test Mode	Max Average power (dBm)	Antenna Gain (dBi)	Max Tune up (dBm)	Max Tune up (W)	Operation Distance R(cm)	Power Density (mW/cm <sup>2</sup> )	Limit of Power Density S(mW/cm <sup>2</sup> ) for FCC	Result
GSM850	23.97	-1	24	0.25	20	<b>0.050</b>	<b>0.55</b>	Pass
GSM1900	20.97	1.5	21	0.13	20	0.025	1	Pass
WCDMA B2	22.97	1.5	23	0.20	20	<b>0.040</b>	<b>1</b>	Pass
WCDMA B4	23.04	1.5	23	0.20	20	0.040	1	Pass
WCDMA B5	22.96	-1	24	0.25	20	0.050	0.55	Pass
LTE B2	23.52	1.5	24	0.25	20	0.050	<b>1</b>	Pass
LTE B4	23.61	1.5	24	0.25	20	0.050	1	Pass
LTE B5	23.31	-1	24	0.25	20	0.050	0.549	Pass
LTE B7	23.28	1.5	24	0.25	20	0.050	1	Pass

Remark:

For GSM850&GSM1900

The averaged power calculated method are shown as below:

Averaged power=Maximum burst averaged power (1 Tx Slot)+(10lg(1/8))dB

Averaged power=Maximum burst averaged power (2 Tx Slot)+(10lg(2/8))dB

Averaged power=Maximum burst averaged power (3 Tx Slot)+(10lg(3/8))dB

Averaged power=Maximum burst averaged power (4 Tx Slot)+(10lg(4/8))dB

So the max Average power for GSM850 is 33-9.03=23.97dBm

The max Average power for GSM 1900 is 30-9.03=20.97dBm

**--End of the Report--**