



MPE Report

Report No.: STS2512294H01

Issued for

SIMCom Wireless Solutions Limited

No.633, Jinzhong Road, Shanghai, China

Product Name: LTE /GNSS MODULE

Brand Name: SIMCom

Model Name: SIM7600NA

Series Model(s): SIM7600NA miniPCIE

FCC ID: 2AJYU-8PYA006

Test Standard: FCC 47CFR §2.1091

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the ShenZhen STS Test Services Co., Ltd.

**TEST REPORT**

Applicant's Name.....: SIMCom Wireless Solutions Limited
Address: No.633, Jinzhong Road,Shanghai, China
Manufacturer's Name.....: SIMCom Wireless Solutions Limited
Address: No.633, Jinzhong Road,Shanghai, China

Product Description

Product Name.....: LTE /GNSS MODULE
Brand Name: SIMCom
Model Name: SIM7600NA
Series Model(s).....: SIM7600NA miniPCIE

Test Standards: FCC 47CFR §2.1091
447498 D01 Interim General RF Exposure Guidance v06

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Date of Test:

Date of receipt of test item.....: 27 Dec. 2025

Date (s) of performance of tests: 27 Dec. 2025 ~ 31 Jan. 2026

Date of Issue.....: 31 Jan. 2026

Test Result.....: **Pass**

Testing Engineer :

(Lenon Hou)

Technical Manager :

(Skylar Li)

Authorized Signatory :

(Bovey Yang)





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	31 Jan. 2026	STS2512294H01	ALL	Initial Issue



1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	LTE /GNSS MODULE	
Brand Name	SIMCom	
Model Name	SIM7600NA	
Series Model(s)	SIM7600NA miniPCIE	
Model Difference	Only different in model name and appearance.	
Product Description	The EUT is Car media player	
	Operation Frequency	TX: TE Band 2:1850~1910MHz LTE Band 4:1710~1755MHz LTE Band 5:824~849MHz LTE Band 12:699~716MHz LTE Band 13:777~787MHz LTE Band 14:788~798MHz LTE Band 25:1850~1915MHz LTE Band 26:814~849MHz LTE Band 41:2496~2690MHz LTE Band 66:1710~1780MHz LTE Band 71:663~698MHz RX: TE Band 2:1930 ~1990MHz LTE Band 4:2110~2155MHz LTE Band 5:869~894MHz LTE Band 12:729~746MHz LTE Band 13:746~756MHz LTE Band 14:758~768MHz LTE Band 25:1930~1995MHz LTE Band 26:859~894MHz LTE Band 41:2496~2690MHz LTE Band 66:2110~2200MHz LTE Band 71:617~652MHz
	Modulation Type	QPSK /16QAM
	Antenna gain	Band2:2.29dBi, Band4:1.4dBi, Band5:0.65dBi, Band12:-0.62dBi, Band13:0.47dBi, Band14:0.58dBi, Band25:2.29dBi, Band26:10.65dBi, Band41:0.72dBi, Band66:1.4dBi, Band71:-0.62dBi
	Antenna Designation	FPC
Power Rating	Input: DC 12V Output: Maximum amplifier output power 25W/14.4V	
Adapter	Input: 3.8V	
Hardware Version	-40℃ to +85℃	



Software Version	V1.01
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1.2 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01



2. FCC 47CFR §2.1091 REQUIREMENT

2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1310 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.

Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

2.2 LIMIT

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environmental impact of the human exposure to radio-frequency (RF) radiation as specified in 1.1307 (b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)
Limits for Occupational / controlled Exposures			
300 - 1500	--	--	F/300
3.0-30	1842/f	4.89/f	*(900/f ²)
1500 – 100000	--	--	5.0
Limits for General population / Uncontrolled Exposure			
300 - 1500	--	--	F/1500
1.34-30	824/f	2.19/f	*(180f ²)
1500 – 100000	--	--	1.0

F= Frequency in MHz

Friss Formula

Friss Transmission Formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = Distance between observation point and the center of radiator in cm

If we know the maximum gain of the antenna and the total output power to the antenna, through calculation, we will know MPE value at distance 20cm.



2.3 TEST RESULT

Tune up

Mode	Detector	Tune up Power
LTE Band 2	AV	25±1
LTE Band 4	AV	25±1
LTE Band 5	AV	25±1
LTE Band 12	AV	25±1
LTE Band 13	AV	25±1
LTE Band 14	AV	25±1
LTE Band 25	AV	25±1
LTE Band 26	AV	25±1
LTE Band 41	AV	25±1
LTE Band 66	AV	25±1
LTE Band 71	AV	25±1

RF Function	Frequency (MHz)	Separation distance (cm)	Max Tune Up Power (dBm)	ANT Gain (dBi)	Max EIRP (dBm)	Max EIRP (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Ratio	Result
LTE Band 2	1850	20	26.00	2.29	32.08	28.29	674.528	0.134	1	Pass
LTE Band 4	1710	20	26.00	1.4	32.03	27.40	549.541	0.109	1	Pass
LTE Band 5	824	20	26.00	0.65	25.03	26.65	462.381	0.092	0.549	Pass
LTE Band 12	699	20	26.00	-0.6	26.08	25.38	345.144	0.069	0.466	Pass
LTE Band 13	777	20	26.00	0.47	26.08	26.47	443.609	0.088	0.518	Pass
LTE Band 14	788	20	26.00	0.58	25.57	26.58	454.988	0.091	0.525	Pass
LTE Band 25	1850	20	26.00	2.29	21.80	28.29	674.528	0.134	1	Pass
LTE Band 26	814	20	26.00	0.65	16.11	26.65	462.381	0.092	0.543	Pass
LTE Band 41	2496	20	26.00	0.72	22.57	26.72	469.894	0.093	1	Pass
LTE Band 66	1710	20	26.00	1.4	4.78	27.40	549.541	0.109	1	Pass
LTE Band 71	663	20	26.00	-0.6	6.78	25.38	345.144	0.069	0.442	Pass

Note: 1. The Maximum power is less than the limit, complies with the exemption requirements.

2. ERP = EIRP - 2.15

※※※※※END OF THE REPORT※※※※※