RF Exposure Evaluation Declaration

FCC ID:	2AYEX-SK202A
IC	26812-SK202A
APPLICANT:	Shenzhen EPS Technology Co., Ltd.

Application Type:	Certification
Product:	Contactless Ethernet module
Model No.:	SK202A
FCC Classification:	Low Power Communication Device Transmitter (DXX)
FCC Rule Part(s):	2.1091
ISED Rule(s):	RSS-102, Issue 5
Test Date:	December 18, 2020

Reviewed By: oscar shi
Oscar Shi

Approved By: Robin Wu
Robin Wu

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

Revision History

Report No.	Version	Description	Issue Date	Note
2012RSU016-U4	Rev. 01	Initial Report	01-16-2021	Valid

CONTENTS

1. GENERAL INFORMATION

1.1. Applicant

Shenzhen EPS Technology Co., Ltd.

9F, Tower 1, Shenyejinyuan Building, Qingshuihe 1st Road, Qingshuihe Street, Luohu District, Shenzhen

1.2. Manufacturer

Shenzhen EPS Technology Co., Ltd.

9F, Tower 1, Shenyejinyuan Building, Qingshuihe 1st Road, Qingshuihe Street, Luohu District, Shenzhen

1.3. Testing Facility

☒	**Test Site – MRT Suzhou Laboratory**	
	Laboratory Location (Suzhou – Wuzhong)	
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China	
	Laboratory Location (Suzhou – SIP)	
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China	
	Laboratory Accreditations	
	A2LA: 3628.01	CNAS: L10551
	FCC: CN1166	ISED: CN0001
	VCCI: R-20025, G-20034, C-20020, T-20020	
☐	**Test Site – MRT Shenzhen Laboratory**	
	Laboratory Location (Shenzhen)	
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China	
	Laboratory Accreditations	
	A2LA: 3628.02	CNAS: L10551
	FCC: CN1284	ISED: CN0105
☐	**Test Site – MRT Taiwan Laboratory**	
	Laboratory Location (Taiwan)	
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)	
	Laboratory Accreditations	
	TAF: L3261-190725	
	FCC: 291082, TW3261	ISED: TW3261

2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name:	Contactless Ethernet module
Model No.:	SK202A
Frequency Range:	60GHz
Power:	DC 4.4~16V or USB
Antenna Type:	Horn Antenna
Type of Modulation:	OOK
Antenna Gain:	9dBi

Note: Above information is declared by manufacturer.

3. RF Exposure Evaluation

3.1. Limits

According to FCC 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 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)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	f/1500	6
1500-100,000	--	--	1	30

f= Frequency in MHz

Calculation Formula: $Pd = (Pout*G)/(4*pi*r^2)$

Where

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

r = distance between observation point and center of the radiator in cm

Pd is the limit of MPE, $1mW/cm^2$. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

3.2. Test Result of RF Exposure Evaluation

Product	Contactless Ethernet module
Test Item	RF Exposure Evaluation

For FCC：

Test Mode	Frequency Band (GHz)	Maximum EIRP （Include Max Tune Up value） (dBm)	Power Density at R = 20 cm (mW/cm^2)	Limit (mW/cm^2)
SK202A	58.07~62.83	7.23	0.0011	1

For ISED

Test Mode	Frequency Band (GHz)	Maximum EIRP （Include Max Tune Up value） (dBm)	Power Density at R = 20 cm (mW/cm^2)	Limit (mW/cm^2)
SK202A	58.07~62.83	7.23	0.0011	1

CONCLUSION:

Therefore, the Max Power Density at R (20 cm) = 0.0011 mW/cm^2 < 1 mW/cm^2.

So the safety distance is 20cm for Contactless Ethernet module installed without any other radio equipment.

The End

Appendix A - EUT Photograph

Refer to “2012RSU016-UE” file.