

FCC Maximum Permissible Exposure (MPE) Estimation Report

Report Number	:	6895025110701A	Date of Issu	e: 2025-08-26
Model/HVIN	<u>:</u>	A1783		
Product Type	: Anker SOLIX C2000 Gen 2 Portable Power Station			
Applicant	: Anker Innovations Limited			
Address	: Unit 56, 8th Floor, Tower 2, Admiralty Centre, 18 Harcourt Road,			
	Central and Western District, HONG KONG			
Manufacturer	: Anker Innovations Limited			
	Unit 56, 8th Floor, Tower 2, Admiralty Centre, 18 Harcourt Road,			
Address	: Central and Western District, HONG KONG			
Test Result	:	■ Positive □ Neg	gative	
Total pages including Appendices	:.	9		

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2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen

Branch

Building 12 & 13, Zhiheng Wisdomland Business Park,

Guankou Erlu, Nantou, Nanshan District,

Shenzhen, Guangdong, China

Telephone: 86 755 8828 6998

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FCC Registration No.: 514049

FCC Designation Number: CN5009



3 Description of the Equipment Under Test

Product: Anker SOLIX C2000 Gen 2 Portable Power Station

Model no.: A1783

FCC ID: 2AOKB-A1783

IC: 23451-A1783

PMN: Anker SOLIX C2000 Gen 2 Portable Power Station

HVIN: A1783

FVIN: V1.0

Rating: See below label for details

RF Transmission Frequency: 2402MHz-2480MHz for BLE

2412MHz-2462MHz for 2.4GHz Wi-Fi

No. of Operated Channel: 40 for GFSK

11 for 802.11b/g/n20

7 for 802.11n40

Modulation for BLE GFSK

Modulation for 2.4GHz Wi-Fi 802.11b: BPSK, QPSK, CCK

802.11g/802.11n20/802.11n40: BPSK, QPSK, 16-QAM, 64-QAM

Antenna Type: FPC Antenna

Antenna Gain: 3.53dBi

Description of the EUT: The Equipment Under Test (EUT) is a Anker SOLIX C2000 Gen 2

Portable Power Station supports Bluetooth Low Energy / Wi-Fi functions

Label:



device contains energy higher than 1 kWh, Sultable for Use in Iter CAUTION – Bits of Flighty To Persons, Do not use this part of the CAUTION – Bits of Flighty Cauties are damaged in any way. CAUTION – This device is not intended for use in a cautie of CAUTION : Risk of Electric Shock. Connect only to part of the CAUTION in the Cauties of the Cauties

AVERTISSEMENT: 5

endommages de quelque taçon.
MISE EN GARDE:
MISE EN GARDE:
DANGER! cet apparelle
numide a l'ext















4 General Information

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Prepared By
Project Engineer

Date

Name

Signature

Signature

Approved By
Project Manager

Date

Name

Signature

Signature



5 Test Specifications

Test Standards				
ANSI Std C95.1-2019	Safety Levels with Respect to Human Exposure to Radio			
	Frequency Electromagnetic Fields, 3 kHz – 300 GHz.(IEEE			
	Std C95.1-1991)			
KDB 447498 D01	General RF Exposure Guidance v06			
CFR § 2.1091	Radiofrequency radiation exposure evaluation: mobile devices.			



6 RF Exposure Requirements

An estimation of MPE in this application for product is used to ensure if it complies with the rules of the standard in the regulation list above.

Maximum permissible exposure (MPE) refers to the RF energy that is acceptable for human exposure. It is broken down into two categories, Occupational/controlled and General population/uncontrolled.

Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

A rough estimation of the expected exposure in power flux density on a given point can be made with the following equation:

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

G = numeric gain of the antenna in the direction of interest relative to an isotropic radiator

R= distance to the centre of radiation of the antenna

EIRP = P*G

The antenna of the product, under normal use condition is at least 20 cm away from the body of the user. Warning statement to the user for keeping at least 20cm separation distance and the prohibition of operating to a person has been printed on the user's manual. Therefore, the S of the device is calculated with R=20cm, and if it is below the limit S, then we can conclude the device complies with the rules.



7 FCC MPE Limits

We analysis if it comply with the limits for General population/uncontrolled exposure. The FCC MPE limits for field strength and power density are given in 47CFR 1.1310(Table below). These limits are generally based on recommended exposure guidelines published by the National Council on Radiation Protection and Measurements (NCRP), and also partly based on guidelines recommended by the American National Standards Institute (ANSI) in Section 4.1 of ANSI/IEEE C95.1.

(A) Limits for Occupational/controlled Exposure						
Frequency	Electric Field	Magnetic Field	Power	Averaging Time		
Range(MHz)	Strength(E)(V/m)	Strength(H)(A/m)	Density	(minute) E ² , H ² or		
range(minz)	Outerigan(L)(V/III)	Outerigui(11)(7 viii)	(S)(mW/cm ²)	S		
0.3-3.0	614	1.63	(100)*	6		
3.0-30	1842/f	4.89/f	(900/f ²)*	6		
30-300	61.4	0.163	1.0	6		
300-1500			f/300	6		
1500-100,000			5	6		
(B) Limits for General Population/uncontrolled Exposure						
Frequency	Electric Field	Magnetic Field	Power	Averaging Time		
		•	Density	(minute) E 2, H 2 or		
Range(MHz)	Strength(E)(V/m)	Strength(H)(A/m)	(S)(mW/cm ²)	S		
0.3-1.34	614	1.63	(100)*	30		
1.34-30	824/f	2.19/f	(180/f)*	30		
30-300	27.5	0.073	0.2	30		
300-1500	1	1	f/1500	30		
1500-100,000	1	1	1.0	30		
f=frequency in MHz *Plane-wave equivalent power density						



8 RF Exposure Evaluation (FCC)

8.1.1 Calculation of Power Density for Single Chain Transmitters

Mode	EIRP (dBm)	EIRP (mW)	R (cm)	S (mW/cm²)	Limit (mW/cm²)
BLE	8.67	7.36	20	0.00134	1.0
2.4GHz Wi-Fi	27	501.187	20	0.09971	1.0

Note: 2.4GHz Wi-Fi and BLE share the same antenna and do not support simultaneous transmission.

8.1.2 Conclusion

According to the table above, we can conclude that the limit percentage of above supporting frequency bands calculation results are less than 1, therefore, the product meets the requirements.