

6 Safety Human Exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:

Pass

Report No.	CN25GLFG 001
Test Specification	
Test item	Anker SOLIX Smart Generator 5500 (Tri-Fuel)
Identification / Type No.	A7320J40
FCC ID	2AOKB-A7320J40
IC	23451-A7320J40
HVIN	A7320J40
Test standard	CFR47 FCC Part 2: Section 2.1091 FCC KDB Publication 447498 D01 v06 RSS-102 Issue 6 December 15, 2023

Measurement Record:

The maximum conducted power of the Antenna1 is 18.33 dBm, the maximum conducted power of the Antenna2 is 18.50 dBm

The MPE was calculated at 20cm to show compliance with the power density limit

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna

For FCC:

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
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				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

Maximum available Power as below

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum power (dBm)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)
2.4GHz Wi-Fi	2462	3.94	18.33	0.03355	1
Bluetooth Low Energy	2402	3.94	3.94	0.00122	1

For IC:

This product meets the requirements of RSS-102 Clause 6.6, therefore RF exposure meets the limit requirements.