

FCC ID: 2ALVK-HAA5T

Portable device

According to §15.247(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to KDB447498 D01 General RF Exposure Guidance V06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right]^* \left[\sqrt{f(\text{GHz})} \right] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

f(GHz) is the RF channel transmit frequency in GHz;

Power and distance are rounded to the nearest mW and mm before calculation;

The result is rounded to one decimal place for comparison;

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

We use 5mm as separation distance to calculate.

Maximum measured transmitter power:

BT/BLE

	Channel Freq. (MHz)	Max Transmit Power (dBm)	Max tune-up power (dBm)	Result calculation	1-g SAR
GFSK	2402	7.337	8	1.956	3.0
	2441	7.966	8	1.972	3.0
	2480	8.414	9	2.502	3.0
pi/4-DQPSK	2402	7.956	8	1.956	3.0
	2441	8.417	9	2.482	3.0
	2480	8.915	9	2.502	3.0
8DPSK	2402	7.939	8	1.956	3.0
	2441	8.419	9	2.482	3.0
	2480	8.923	9	2.502	3.0
BLE(1M)	2402	7.39	8	1.956	3.0
	2440	7.76	8	1.971	3.0
	2480	8.09	9	2.502	3.0
BLE(2M)	2402	7.63	8	1.956	3.0
	2440	7.95	8	1.971	3.0
	2480	8.29	9	2.502	3.0

Conclusion:

For the max result : $2.502 \leq 3.0$ for 1-g SAR extremity SAR, No SAR is required.

Signature:



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NAME AND TITLE (Please print or type): Lisa Wang/Manager

COMPANY (Please print or type): Shenzhen EMTEK Co.,Ltd./Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China