

FCC ID: S7JNX16W10232

Portable device

According to §15.247(e)(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 V05

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:

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

$f(\text{GHz})$ 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:

802.11b/g/n HT20/n HT40:

Transmit Frequency (GHz)	Mode	Max Conducted Power (dBm)	tune up maximum power	Result calculation	1-g SAR
2.412	11b	8.70	6.7dBm-8.7dBm	2.303	3.0
2.437	11b	8.66	6.7dBm-8.7dBm	2.315	3.0
2.462	11b	8.57	6.7dBm-8.7dBm	2.326	3.0
2.412	11g	8.47	6.7dBm-8.7dBm	2.303	3.0
2.437	11g	8.49	6.7dBm-8.7dBm	2.315	3.0
2.462	11g	8.41	6.7dBm-8.7dBm	2.326	3.0
2.412	11n HT20	8.29	6.7dBm-8.7dBm	2.303	3.0
2.437	11n HT20	8.22	6.7dBm-8.7dBm	2.315	3.0
2.462	11n HT20	8.26	6.7dBm-8.7dBm	2.326	3.0
2.422	11n HT40	8.07	6.7dBm-8.7dBm	2.307	3.0
2.437	11n HT40	8.09	6.7dBm-8.7dBm	2.315	3.0
2.452	11n HT40	8.11	6.7dBm-8.7dBm	2.322	3.0

BT DTS:

Transmit Frequency (GHz)	Mode	Max Conducted Power (dBm)	tune up maximum power	Result calculation	1-g SAR
2.402	GFSK	6.632	5.2dBm-7.2dBm	1.627	3.0
2.440	GFSK	6.651	5.2dBm-7.2dBm	1.640	3.0
2.480	GFSK	7.116	5.2dBm-7.2dBm	1.653	3.0

BT DSS:

Transmit Frequency (GHz)	Mode	Max Conducted Power (dBm)	tune up maximum power	Result calculation	1-g SAR
2.402	GFSK	3.181	2dBm-4dBm	0.779	3.0
2.441	GFSK	3.266	2dBm-4dBm	0.785	3.0
2.480	GFSK	3.212	2dBm-4dBm	0.791	3.0
2.402	$\pi/4$ -DQPSK	4.600	3dBm-5dBm	0.980	3.0
2.441	$\pi/4$ -DQPSK	4.684	3dBm-5dBm	0.988	3.0
2.480	$\pi/4$ -DQPSK	4.572	3dBm-5dBm	0.996	3.0
2.402	8DPSK	4.796	3dBm-5dBm	0.980	3.0
2.441	8DPSK	4.860	3dBm-5dBm	0.988	3.0
2.480	8DPSK	4.734	3dBm-5dBm	0.996	3.0

Conclusion:

For the max result : $2.326 \leq 3.0$ for 1-g SAR extremity SAR, No SAR is required.

Signature: 

Date: 2016-02-23

NAME AND TITLE (Please print or type): David Lee/Manager

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