

FCC ID: XHWEGQ238BD

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 V06

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

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]· $[\sqrt{f(GHZ)}] \le 3.0$ for 1-g SAR and ≤ 7.5 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

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

BT-BLE:

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d power (mW)	Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	2.60	1.82	3±0.5	3.50	2.24	<5	0.69393	3.00	YES
	2.440	2.89	1.95	3±0.5	3.50	2.24	<5	0.69940	3.00	YES
	2.480	2.36	1.72	3±0.5	3.50	2.24	<5	0.70511	3.00	YES

BT-EDR

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d power (mW)	Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	1.95	1.57	4±0.5	4.50	2.82	<5	0.87361	3.00	YES
	2.441	2.61	1.82	4±0.5	4.50	2.82	<5	0.88067	3.00	YES
	2.480	2.04	1.60	4±0.5	4.50	2.82	<5	0.88768	3.00	YES
Pi/4 DQPSK	2.402	3.18	2.08	4±0.5	4.50	2.82	<5	0.87361	3.00	YES
	2.441	3.74	2.37	4±0.5	4.50	2.82	<5	0.88067	3.00	YES
	2.480	3.16	2.07	4±0.5	4.50	2.82	<5	0.88768	3.00	YES
8DPSK	2.402	3.38	2.18	4±0.5	4.50	2.82	<5	0.87361	3.00	YES
	2.441	4.18	2.62	4±0.5	4.50	2.82	<5	0.88067	3.00	YES
	2.480	3.65	2.32	4±0.5	4.50	2.82	<5	0.88768	3.00	YES



WIFI:2.4G

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d power (mW)	Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculatio n	SAR Exclusion threshold	SAR test exclusion
802.11b	2.412	9.34	8.59	9±0.5	9.50	8.91	<5	2.76834	3.00	YES
	2.437	9.00	7.94	9±0.5	9.50	8.91	<5	2.78264	3.00	YES
	2.462	9.02	7.98	9±0.5	9.50	8.91	<5	2.79688	3.00	YES
	2.412	8.33	6.81	8±0.5	8.50	7.08	<5	2.19897	3.00	YES
802.11g	2.437	8.07	6.41	8±0.5	8.50	7.08	<5	2.21033	3.00	YES
	2.462	8.31	6.78	8±0.5	8.50	7.08	<5	2.22164	3.00	YES
802.11n20	2.412	7.20	5.25	7±0.5	7.50	5.62	<5	1.74670	3.00	YES
	2.437	7.39	5.48	7±0.5	7.50	5.62	<5	1.75573	3.00	YES
	2.462	7.04	5.06	7±0.5	7.50	5.62	<5	1.76471	3.00	YES
802.11n40	2.422	7.43	5.53	7±0.5	7.50	5.62	<5	1.75032	3.00	YES
	2.437	7.09	5.12	7±0.5	7.50	5.62	<5	1.75573	3.00	YES
	2.452	7.47	5.58	7±0.5	7.50	5.62	<5	1.76113	3.00	YES

Conclusion:

For the max result : $2.79688W/Kg \le FCC \text{ Limit } 3.0 \text{ for } 1g \text{ SAR}.$