

FCC ID: 2AEKR-TG08MK

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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ 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

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

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 calculation	SAR Exclusion threshold	SAR test exclusion
GFSK (1Mbps)	2.402	-11.435	0.07	-11±1	-10.00	0.10	<5	0.03100	3.00	YES
	2.441	-7.099	0.20	-7±1	-6.00	0.25	<5	0.07849	3.00	YES
	2.480	-7.928	0.16	-7±1	-6.00	0.25	<5	0.07911	3.00	YES
GFSK (2Mbps)	2.402	-11.477	0.07	-11±1	-10.00	0.10	<5	0.03100	3.00	YES
	2.441	-7.089	0.20	-7±1	-6.00	0.25	<5	0.07849	3.00	YES
	2.480	-7.928	0.16	-7±1	-6.00	0.25	<5	0.07911	3.00	YES

BT:

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 calculation	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-2.563	0.55	-2±1	-1.00	0.79	<5	0.24622	3.00	YES
	2.441	1.596	1.44	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	0.518	1.13	1±1	2.00	1.58	<5	0.49918	3.00	YES
Pi/4 DQPSK	2.402	-3.205	0.48	-3±1	-2.00	0.63	<5	0.19558	3.00	YES
	2.441	1.033	1.27	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	-0.013	1.00	0±1	1.00	1.26	<5	0.39651	3.00	YES
8DPSK	2.402	-3.091	0.49	-3±1	-2.00	0.63	<5	0.19558	3.00	YES
	2.441	1.138	1.30	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	0.073	1.02	1±1	2.00	1.58	<5	0.49918	3.00	YES

2.4G WIFI:

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 calculation	SAR Exclusion threshold	SAR test exclusion
802.11b	2.412	7.71	5.90	8±1	9.00	7.94	<5	2.46728	3.00	YES
	2.437	7.56	5.70	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	7.04	5.06	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11g	2.412	6.86	4.85	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	6.11	4.08	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	6.69	4.67	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n20	2.412	6.83	4.82	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	5.83	3.83	6±1	7.00	5.01	<5	1.56480	3.00	YES
	2.462	6.62	4.59	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n40	2.422	5.3	3.39	6±1	7.00	5.01	<5	1.55997	3.00	YES
	2.437	5.37	3.44	6±1	7.00	5.01	<5	1.56480	3.00	YES
	2.452	5.02	3.18	6±1	7.00	5.01	<5	1.56960	3.00	YES

5G WIFI:

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 calculation	SAR Exclusion threshold	SAR test exclusion
802.11a	5.180	6.929	4.93	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.200	6.508	4.48	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.240	6.404	4.37	7±1	8.00	6.31	<5	2.88865	3.00	YES
802.11n20	5.180	5.922	3.91	6±1	7.00	5.01	<5	2.28137	3.00	YES
	5.200	5.516	3.56	6±1	7.00	5.01	<5	2.28577	3.00	YES
	5.240	5.367	3.44	6±1	7.00	5.01	<5	2.29454	3.00	YES
802.11n40	5.190	6.566	4.54	7±1	8.00	6.31	<5	2.87484	3.00	YES
	5.230	5.680	3.70	6±1	7.00	5.01	<5	2.29235	3.00	YES
802.11ac20	5.180	5.952	3.94	6±1	7.00	5.01	<5	2.28137	3.00	YES
	5.200	5.837	3.83	6±1	7.00	5.01	<5	2.28577	3.00	YES
	5.240	5.903	3.89	6±1	7.00	5.01	<5	2.29454	3.00	YES
802.11ac40	5.190	6.514	4.48	7±1	8.00	6.31	<5	2.87484	3.00	YES
	5.230	5.415	3.48	6±1	7.00	5.01	<5	2.29235	3.00	YES
802.11ac80	5.210	5.427	3.49	6±1	7.00	5.01	<5	2.28796	3.00	YES

5.8G WIFI:

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 calculation	SAR Exclusion threshold	SAR test exclusion
802.11a	5.745	5.777	3.78	6±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	5.339	3.42	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	5.547	3.59	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n20	5.745	5.380	3.45	6±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	5.922	3.91	6±1	7.00	5.01	<5	2.41091	3.00	YES
	5.825	5.662	3.68	6±1	7.00	5.01	<5	2.41923	3.00	YES
802.11n40	5.755	5.496	3.54	6±1	7.00	5.01	<5	2.40465	3.00	YES
	5.795	5.675	3.69	6±1	7.00	5.01	<5	2.41300	3.00	YES
802.11ac20	5.745	5.531	3.57	6±1	7.00	5.01	<5	2.40256	3.00	YES
	5.785	4.078	2.56	5±1	6.00	3.98	<5	1.91506	3.00	YES
	5.825	4.645	2.91	5±1	6.00	3.98	<5	1.92167	3.00	YES
802.11ac40	5.755	4.203	2.63	5±1	6.00	3.98	<5	1.91008	3.00	YES
	5.795	4.667	2.93	5±1	6.00	3.98	<5	1.91671	3.00	YES
802.11ac80	5.775	4.179	2.62	5±1	6.00	3.98	<5	1.91340	3.00	YES

Conclusion:

For the max result : $2.88865\text{W/Kg} \leq \text{FCC Limit } 3.0 \text{ for } 1\text{g SAR}$.
The Product unsupported at the same time to Transmitting.