

FCC ID:2BF6E-K16G**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.

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 calculation	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	1.736	1.49	1±1	2.00	1.58	<5	0.49127	3.00	YES
	2.441	1.837	1.53	1±1	2.00	1.58	<5	0.49524	3.00	YES
	2.480	1.489	1.41	1±1	2.00	1.58	<5	0.49918	3.00	YES
π /4DQPSK	2.402	2.489	1.77	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	2.498	1.78	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	2.101	1.62	2±1	3.00	2.00	<5	0.62843	3.00	YES
8DQPSK	2.402	2.627	1.83	2±1	3.00	2.00	<5	0.61847	3.00	YES
	2.441	2.774	1.89	2±1	3.00	2.00	<5	0.62347	3.00	YES
	2.480	2.27	1.69	2±1	3.00	2.00	<5	0.62843	3.00	YES

2.4GWIFI:

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 ANT1	2.412	4.681	2.94	4±1	5.00	3.16	<5	0.98224	3.00	YES
	2.437	5.164	3.28	5±1	6.00	3.98	<5	1.24296	3.00	YES
	2.462	4.297	2.69	4±1	5.00	3.16	<5	0.99237	3.00	YES
802.11g ANT1	2.412	4.526	2.84	4±1	5.00	3.16	<5	0.98224	3.00	YES
	2.437	4.336	2.71	4±1	5.00	3.16	<5	0.98732	3.00	YES
	2.462	4.649	2.92	4±1	5.00	3.16	<5	0.99237	3.00	YES
802.11b ANT2	2.412	4.796	3.02	4±1	5.00	3.16	<5	0.98224	3.00	YES
	2.437	4.588	2.88	4±1	5.00	3.16	<5	0.98732	3.00	YES
	2.462	4.297	2.69	4±1	5.00	3.16	<5	0.99237	3.00	YES
802.11g ANT2	2.412	4.483	2.81	4±1	5.00	3.16	<5	0.98224	3.00	YES
	2.437	4.354	2.73	4±1	5.00	3.16	<5	0.98732	3.00	YES
	2.462	4.586	2.87	4±1	5.00	3.16	<5	0.99237	3.00	YES

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
802.11n(HT 20) MIMO	2.412	7.644	5.81	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.801	6.03	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.542	5.68	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n(HT 40) MIMO	2.422	6.662	4.64	6±1	7.00	5.01	<5	1.55997	3.00	YES
	2.437	6.853	4.85	6±1	7.00	5.01	<5	1.56480	3.00	YES
	2.452	6.866	4.86	6±1	7.00	5.01	<5	1.56960	3.00	YES

5.2GWIFI:

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 ANT1	5.18	4.194	2.63	4±1	5.00	3.16	<5	1.43944	3.00	YES
	5.2	4.373	2.74	4±1	5.00	3.16	<5	1.44222	3.00	YES
	5.24	4.76	2.99	4±1	5.00	3.16	<5	1.44776	3.00	YES
802.11a ANT2	5.18	4.213	2.64	4±1	5.00	3.16	<5	1.43944	3.00	YES
	5.2	4.792	3.01	4±1	5.00	3.16	<5	1.44222	3.00	YES
	5.24	5.368	3.44	5±1	6.00	3.98	<5	1.82262	3.00	YES

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
802.11ac20 MIMO	5.18	7.636	5.80	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.2	7.418	5.52	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.24	7.69	5.87	7±1	8.00	6.31	<5	2.88865	3.00	YES
802.11ac40 MIMO	5.19	6.394	4.36	6±1	7.00	5.01	<5	2.28357	3.00	YES
	5.23	6.579	4.55	6±1	7.00	5.01	<5	2.29235	3.00	YES
802.11ac80 MIMO	5.21	5.921	3.91	5±1	6.00	3.98	<5	1.81739	3.00	YES
802.11n(HT20) MIMO	5.18	7.477	5.59	7±1	8.00	6.31	<5	2.87207	3.00	YES
	5.2	7.863	6.11	7±1	8.00	6.31	<5	2.87761	3.00	YES
	5.24	7.662	5.84	7±1	8.00	6.31	<5	2.88865	3.00	YES
802.11n(HT40) MIMO	5.19	6.655	4.63	6±1	7.00	5.01	<5	2.28357	3.00	YES
	5.23	6.742	4.72	6±1	7.00	5.01	<5	2.29235	3.00	YES

5.3GWIFI:

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 ANT1	5.26	4.375	2.74	4±1	5.00	3.16	<5	1.45052	3.00	YES
	5.28	4.349	2.72	4±1	5.00	3.16	<5	1.45327	3.00	YES
	5.32	4.313	2.70	4±1	5.00	3.16	<5	1.45877	3.00	YES
802.11a ANT2	5.26	4.03	2.53	4±1	5.00	3.16	<5	1.45052	3.00	YES
	5.28	3.977	2.50	3±1	4.00	2.51	<5	1.15438	3.00	YES
	5.32	4.751	2.99	4±1	5.00	3.16	<5	1.45877	3.00	YES

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
802.11ac20 MIMO	5.26	7.388	5.48	7±1	8.00	6.31	<5	2.89416	3.00	YES
	5.28	7.17	5.21	7±1	8.00	6.31	<5	2.89966	3.00	YES
	5.32	7.468	5.58	7±1	8.00	6.31	<5	2.91062	3.00	YES
802.11ac40 MIMO	5.27	7.072	5.10	7±1	8.00	6.31	<5	2.89691	3.00	YES
	5.31	7.126	5.16	7±1	8.00	6.31	<5	2.90789	3.00	YES
802.11ac80 MIMO	5.29	6.018	4.00	6±1	7.00	5.01	<5	2.30546	3.00	YES
802.11n(HT20) MIMO	5.26	7.471	5.59	7±1	8.00	6.31	<5	2.89416	3.00	YES
	5.28	7.139	5.17	7±1	8.00	6.31	<5	2.89966	3.00	YES
	5.32	7.779	6.00	7±1	8.00	6.31	<5	2.91062	3.00	YES
802.11n(HT40) MIMO	5.27	7.47	5.58	7±1	8.00	6.31	<5	2.89691	3.00	YES
	5.31	7.489	5.61	7±1	8.00	6.31	<5	2.90789	3.00	YES

5.6GWIFI:

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 ANT1	5.5	4.531	2.84	4±1	5.00	3.16	<5	1.48324	3.00	YES
	5.58	4.898	3.09	4±1	5.00	3.16	<5	1.49399	3.00	YES
	5.7	4.883	3.08	4±1	5.00	3.16	<5	1.50997	3.00	YES
802.11a ANT2	5.5	4.318	2.70	4±1	5.00	3.16	<5	1.48324	3.00	YES
	5.58	4.67	2.93	4±1	5.00	3.16	<5	1.49399	3.00	YES
	5.7	4.983	3.15	4±1	5.00	3.16	<5	1.50997	3.00	YES

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
802.11ac20 MIMO	5.5	7.595	5.75	7±1	8.00	6.31	<5	2.95945	3.00	YES
	5.58	7.518	5.65	7±1	8.00	6.31	<5	2.98090	3.00	YES
	5.7	7.048	5.07	6.5±1	7.50	5.62	<5	2.68514	3.00	YES
802.11ac40 MIMO	5.51	6.877	4.87	6±1	7.00	5.01	<5	2.35291	3.00	YES
	5.67	6.803	4.79	6±1	7.00	5.01	<5	2.38683	3.00	YES
802.11ac80 MIMO	5.53	5.445	3.50	5±1	6.00	3.98	<5	1.87237	3.00	YES
802.11n(HT20) MIMO	5.5	7.595	5.75	7±1	8.00	6.31	<5	2.95945	3.00	YES
	5.58	7.991	6.30	7±1	8.00	6.31	<5	2.98090	3.00	YES
	5.7	7.132	5.17	6.5±1	7.50	5.62	<5	2.68514	3.00	YES
802.11n(HT40) MIMO	5.51	6.775	4.76	6±1	7.00	5.01	<5	2.35291	3.00	YES
	5.67	6.586	4.56	6±1	7.00	5.01	<5	2.38683	3.00	YES

5.8GWIFI:

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 ANT1	5.745	4.646	2.91	4±1	5.00	3.16	<5	1.51592	3.00	YES
	5.785	3.762	2.38	3±1	4.00	2.51	<5	1.20832	3.00	YES
	5.825	4.31	2.70	4±1	5.00	3.16	<5	1.52643	3.00	YES
802.11a ANT2	5.745	4.192	2.63	4±1	5.00	3.16	<5	1.51592	3.00	YES
	5.785	4.646	2.91	4±1	5.00	3.16	<5	1.52118	3.00	YES
	5.825	4.739	2.98	4±1	5.00	3.16	<5	1.52643	3.00	YES

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
802.11ac20 MIMO	5.745	7.056	5.08	6.5±1	7.50	5.62	<5	2.69572	3.00	YES
	5.785	7.005	5.02	6.5±1	7.50	5.62	<5	2.70509	3.00	YES
	5.825	7.121	5.15	6.5±1	7.50	5.62	<5	2.71443	3.00	YES
802.11ac40 MIMO	5.755	6.969	4.98	6±1	7.00	5.01	<5	2.40465	3.00	YES
	5.795	6.774	4.76	6±1	7.00	5.01	<5	2.41300	3.00	YES
802.11ac80 MIMO	5.775	5.45	3.51	5±1	6.00	3.98	<5	1.91340	3.00	YES
802.11n(HT20) MIMO	5.745	7.206	5.26	6.5±1	7.50	5.62	<5	2.69572	3.00	YES
	5.785	7.086	5.11	6.5±1	7.50	5.62	<5	2.70509	3.00	YES
	5.825	7.111	5.14	6.5±1	7.50	5.62	<5	2.71443	3.00	YES
802.11n(HT40) MIMO	5.755	6.856	4.85	6±1	7.00	5.01	<5	2.40465	3.00	YES
	5.795	6.907	4.91	6±1	7.00	5.01	<5	2.41300	3.00	YES

Conclusion:

For the max result : $2.89090 \leq \text{FCC Limit } 3.0$ for 1g SAR.