

MPE ESTIMATION
FCC ID: 2AGN7-X7

1,Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm ²)	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

Note: F= Frequency in MHz

2, Estimation Result

For 2.4G WIFI:

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11b	16.46	16±1(17)	50.12	2	1.585	0.01581
11g	15.52	15±1(16)	39.81	2	1.585	0.01256
11n/HT20	14.87	15±1(16)	39.81	2	1.585	0.01256
11n/HT40	12.68	12±1(13)	19.95	2	1.585	0.00629

$$Pd = \frac{P_{out} * G}{4\pi r^2};$$

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK1700605024-E, antenna gain=2dBi.

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11b	CH1	16.46	44.26	2	1.585	0.01396
	CH6	16.34	43.05	2	1.585	0.01358
	CH11	16.12	40.93	2	1.585	0.01291
11g	CH1	15.52	35.65	2	1.585	0.01125
	CH6	15.16	32.81	2	1.585	0.01035
	CH11	15.10	32.36	2	1.585	0.01021
11n/HT20	CH1	14.87	30.69	2	1.585	0.00968
	CH6	14.34	27.16	2	1.585	0.00857
	CH11	14.16	26.06	2	1.585	0.00822
11n/HT40	CH1	12.68	18.53	2	1.585	0.00585
	CH4	12.22	16.67	2	1.585	0.00526
	CH7	12.09	16.18	2	1.585	0.00510
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: PK Output power= conducted power.						
Conducted power see the test report HK1700605024-E, antenna gain=2dBi.						

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)
11a	16.92	16±1(17)	50.12	2	1.585	0.01581
11n/HT20	16.83	16±1(17)	50.12	2	1.585	0.01581
11n/HT40	16.57	16±1(17)	50.12	2	1.585	0.01581
11ac	15.68	16±1(17)	50.12	2	1.585	0.01581

Note: $Pd = \frac{Pout * G}{4\pi r^2}$;

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK1700605023-E, antenna gain=2dBi.

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)
11a	CH36	16.83	48.19	2	1.585	0.01520
	CH40	16.92	49.20	2	1.585	0.01552
	CH48	16.83	48.19	2	1.585	0.01520
11n/HT20	CH36	16.77	47.53	2	1.585	0.01500
	CH40	16.83	48.19	2	1.585	0.01520
	CH48	16.82	48.08	2	1.585	0.01517
11n/HT40	CH38	16.56	45.30	2	1.585	0.01429
	CH46	16.57	45.39	2	1.585	0.01432
11ac	CH42	15.68	36.98	2	1.585	0.01167
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: PK Output power= conducted power.						
Conducted power see the test report HK1700605023-E, antenna gain=2dBi.						

For 5.8G WIFI:

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	16.83	16±1(17)	50.12	2	1.585	0.01581
11n/HT20	16.74	16±1(17)	50.12	2	1.585	0.01581
11n/HT40	16.47	16±1(17)	50.12	2	1.585	0.01581
11ac	15.55	16±1(17)	50.12	2	1.585	0.01581
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: PK Output power= conducted power. Conducted power see the test report HK1700605023-E, antenna gain=2dBi.						

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	CH149	16.83	48.19	2	1.585	0.01520
	CH157	16.83	48.19	2	1.585	0.01520
	CH165	16.71	46.88	2	1.585	0.01479
11n/HT20	CH149	16.66	46.34	2	1.585	0.01462
	CH157	16.74	47.21	2	1.585	0.01489
	CH165	16.46	44.26	2	1.585	0.01396
11n/HT40	CH151	16.33	42.95	2	1.585	0.01355
	CH159	16.47	44.36	2	1.585	0.01399
11ac	CH155	15.55	35.89	2	1.585	0.01132
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: PK Output power= conducted power. Conducted power see the test report HK1700605023-E, antenna gain=2dBi.						

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