

MPE ESTIMATION
 FCC ID: 2AMAK-XT200

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 antenna 1:

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	16.45	16±1(17)	50.12	1	1.2589	0.01256
11g	15.46	16±1(17)	50.12	1	1.2589	0.01256
11n/HT20	14.71	15±1(16)	39.81	1	1.2589	0.00998
11n/HT40	12.76	12±1(13)	19.95	1	1.2589	0.00500

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HUAK170518073-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=1dBi, antenna port 2 gain=1dBi.

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11b	CH1	16.45	44.16	1	1.2589	0.01107
	CH6	16.23	41.98	1	1.2589	0.01052
	CH11	16.13	41.02	1	1.2589	0.01028
11g	CH1	15.32	34.04	1	1.2589	0.00853
	CH6	15.46	35.16	1	1.2589	0.00881
	CH11	15.11	32.43	1	1.2589	0.00813
11n/HT20	CH1	14.57	28.64	1	1.2589	0.00718
	CH6	14.71	29.58	1	1.2589	0.00741
	CH11	13.16	20.70	1	1.2589	0.00519
11n/HT40	CH1	12.76	18.88	1	1.2589	0.00473
	CH4	12.21	16.63	1	1.2589	0.00417
	CH7	12.11	16.26	1	1.2589	0.00407

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HUAK170518073-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=1dBi, antenna port 2 gain=1dBi.

For antenna 2:

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	16.42	16±1(17)	50.12	1	1.2589	0.01256
11g	15.34	16±1(17)	50.12	1	1.2589	0.01256
11n/HT20	14.42	15±1(16)	39.81	1	1.2589	0.00998
11n/HT40	12.82	12±1(13)	19.95	1	1.2589	0.00500

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HUAK170518073-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=1dBi, antenna port 2 gain=1dBi.

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11b	CH1	16.15	41.21	1	1.2589	0.01033
	CH6	16.38	43.45	1	1.2589	0.01089
	CH11	16.42	43.85	1	1.2589	0.01099
11g	CH1	15.21	33.19	1	1.2589	0.00832
	CH6	15.34	34.20	1	1.2589	0.00857
	CH11	15.28	33.73	1	1.2589	0.00845
11n/HT20	CH1	14.34	27.16	1	1.2589	0.00681
	CH6	14.42	27.67	1	1.2589	0.00693
	CH11	13.11	20.46	1	1.2589	0.00513
11n/HT40	CH1	12.82	19.14	1	1.2589	0.00480
	CH4	12.53	17.91	1	1.2589	0.00449
	CH7	12.32	17.06	1	1.2589	0.00427

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HUAK170518073-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=1dBi, antenna port 2 gain=1dBi.

For MIMO:

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	--	--	--	--	--	--
11g	--	--	--	--	--	--
11n/HT20	17.58	17±1(18)	63.10	1	1.2589	0.01581
11n/HT40	15.80	16±1(17)	50.12	1	1.2589	0.01256

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HUAKE170518073-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=1dBi, antenna port 2 gain=1dBi.

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11b	CH1	--	--	--	--	--
	CH6	--	--	--	--	--
	CH11	--	--	--	--	--
11g	CH1	--	--	--	--	--
	CH6	--	--	--	--	--
	CH11	--	--	--	--	--
11n/HT20	CH1	17.47	55.85	1	1.2589	0.01399
	CH6	17.58	57.28	1	1.2589	0.01435
	CH11	16.14	41.11	1	1.2589	0.01030
11n/HT40	CH1	15.80	38.02	1	1.2589	0.00953
	CH4	15.38	34.51	1	1.2589	0.00865
	CH7	15.23	33.34	1	1.2589	0.00835

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HUAK170518073-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=1dBi, antenna port 2 gain=1dBi.

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