



MPE ESTIMATION

**Test report
On Behalf of
Shenzhen Simtoo Intelligent Technology Co., LTD.
For
Fairy Drone
Model No.: XT175**

FCC ID: 2AG45-XT175

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Report Number: HK180516307-2E



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	12.86	12±1(13)	19.95	1	1.2589	0.00500
11g	12.25	12±1(13)	19.95	1	1.2589	0.00500
11n/HT20	11.88	12±1(13)	19.95	1	1.2589	0.00500
11n/HT40	10.76	10±1(11)	12.59	1	1.2589	0.00315

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK180524303-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	12.86	19.32	1	1.2589	0.00484
	CH6	12.52	17.86	1	1.2589	0.00448
	CH11	12.39	17.34	1	1.2589	0.00434
11g	CH1	12.25	16.79	1	1.2589	0.00421
	CH6	11.83	15.24	1	1.2589	0.00382
	CH11	11.67	14.69	1	1.2589	0.00368
11n/HT20	CH1	11.88	15.42	1	1.2589	0.00386
	CH6	11.51	14.16	1	1.2589	0.00355
	CH11	11.64	14.59	1	1.2589	0.00366
11n/HT40	CH1	10.76	11.91	1	1.2589	0.00298
	CH4	10.53	11.30	1	1.2589	0.00283
	CH7	10.47	11.14	1	1.2589	0.00279

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK180524303-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	12.75	12±1(13)	19.95	1	1.2589	0.00500
11g	12.36	12±1(13)	19.95	1	1.2589	0.00500
11n/HT20	11.75	12±1(13)	19.95	1	1.2589	0.00500
11n/HT40	10.89	10±1(11)	12.59	1	1.2589	0.00315

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK180524303-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	12.75	18.84	1	1.2589	0.00472
	CH6	12.61	18.24	1	1.2589	0.00457
	CH11	12.28	16.90	1	1.2589	0.00424
11g	CH1	12.36	17.22	1	1.2589	0.00431
	CH6	12.07	16.11	1	1.2589	0.00404
	CH11	11.84	15.28	1	1.2589	0.00383
11n/HT20	CH1	11.75	14.96	1	1.2589	0.00375
	CH6	11.58	14.39	1	1.2589	0.00361
	CH11	11.71	14.83	1	1.2589	0.00371
11n/HT40	CH1	10.89	12.27	1	1.2589	0.00308
	CH4	10.66	11.64	1	1.2589	0.00292
	CH7	10.50	11.22	1	1.2589	0.00281

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK180524303-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	14.83	14±1(15)	31.62	4	2.51	0.1580
11n/HT40	13.84	14±1(15)	31.62	4	2.51	0.1580

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK180524303-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	14.83	30.41	4	2.51	0.15197
	CH6	14.55	28.51	4	2.51	0.14248
	CH11	14.68	29.38	4	2.51	0.14681
11n/HT40	CH1	13.84	24.21	4	2.51	0.12099
	CH4	13.61	22.96	4	2.51	0.11475
	CH7	13.49	22.34	4	2.51	0.11162

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK180524303-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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