

MPE ESTIMATION
FCC ID: 2AMLI-UM310N

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	19.87	19±1(20)	100.00	2	1.585	0.03155
11g	18.47	19±1(20)	100.00	2	1.585	0.03155
11n/HT20	17.58	17±1(18)	63.10	2	1.585	0.01991
11n/HT40	16.39	17±1(18)	63.10	2	1.585	0.01991

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK170612033-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=2dBi, antenna port 2 gain=2dBi.

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	19.58	19±1(20)	100.00	2	1.585	0.03155
11g	18.91	19±1(20)	100.00	2	1.585	0.03155
11n/HT20	17.34	17±1(18)	63.10	2	1.585	0.01991
11n/HT40	16.87	17±1(18)	63.10	2	1.585	0.01991

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK170612033-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=2dBi, antenna port 2 gain=2dBi.

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	20.47	20±1(21)	125.89	2	1.585	0.03972
11n/HT40	19.58	19±1(20)	100.00	2	1.585	0.03155

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK170612033-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=2dBi, antenna port 2 gain=2dBi.

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	20.47	111.43	2	1.585	0.03515
	CH6	20.35	108.39	2	1.585	0.03420
	CH11	20.36	108.64	2	1.585	0.03427
11n/HT40	CH1	19.58	90.78	2	1.585	0.02864
	CH4	19.58	90.78	2	1.585	0.02864
	CH7	19.41	87.30	2	1.585	0.02754
$Pd = \frac{P_{out} * G}{4\pi r^2};$						
Note:						
Note: The estimation distance is 20cm						
Note: PK Output power= conducted power. Conducted power see the test report HK170612033-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=2dBi, antenna port 2 gain=2dBi.						

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