

MPE ESTIMATION

FCC ID: 2AIT9-PG-106

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

2, Estimation Result

For WIFI+433M:

433MHz:

EIRP(dBm)=77.75(dBuV/m)-95.2=-17.45(dBm)

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)
2462	13.20	13±1(14)	25.12	1.37	1.37	0.006854
433.914	-17.45	-17±1(-16)	0.03	-3.4	0.46	0.000002

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK2406273463-1E/2E,

WIFI antenna gain=1.37dBi;

433M antenna gain=-3.4dBi

2.4G WIFI MPE (max)= 0.006854 (mW/cm²)

433M MPE (max)= 0.000002 (mW/cm²)

simultaneously MPE=0.006854+0.000002=0.006856(mW/cm²)

when the minimum test separation distance is >20 cm, a distance of 20 cm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.006856 which is< 1.0, RF Exposure testing is not required.

-----The End-----