

RF Exposure Report

FCC ID: 2AQ4F-DT-C4301X

The EUT is a All-In-One touchscreen computer for Kiosk operated in the 2412MHz ~ 2462MHz frequency band.

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz

MPE calculation method

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2}$$

S: power density mW/ cm²;

P: power input to the antenna in mW;

g: numeric gain of antenna;

r: distance to centre of radiation in cm

Calculated result

Mode	Max. Peak output power (dBm)	Max. Peak output power (mW)	Antenna Gain (numeric)	Power Density (S) (mW/ cm ²)	Limit of Power Density (S) (mW/ cm ²)
802.11b	8.51	7.09	1.58	0.002229	1
802.11g	7.55	5.68	1.58	0.001786	1

Frequency	Antenn a port	Max. Peak output power	Max. Peak output power	Total Conducted Output Power(PK)	Total Conducted Output Power(PK)	Total Conducted Output Power(PK)	Antenna Gain (numeric)	Power Density (S)	Limit of Power Density (S)
(MHz)		(dBm)	(mW)	(mW)	(dBm)	(mW)	dBi	(mW/ cm ²)	(mW/ cm ²)
TX 802.11n-HT20 Mode									
2412	Ant 1	6.96	4.97	6.306	7.99	6.29	1.58	0.001978	1
	Ant 2	1.27	1.34						
2437	Ant 1	6.65	4.62	5.967	7.75	5.95	1.58	0.001871	1
	Ant 2	1.28	1.34						
2462	Ant 1	6.65	4.62	6.033	7.80	6.02	1.58	0.001893	1
	Ant 2	1.49	1.41						
TX 802.11n-HT40 Mode									
2422	Ant 1	6.31	4.28	5.682	7.54	5.67	1.58	0.001783	1
	Ant 2	1.48	1.41						
2437	Ant 1	6.41	4.38	5.740	7.58	5.72	1.58	0.001798	1
	Ant 2	1.35	1.36						
2452	Ant 1	6.36	4.33	5.718	7.57	5.71	1.58	0.001795	1
	Ant 2	1.44	1.39						

Note1: the antenna gain is 2.0dBi;

Note2: Calculated distance is 20cm, which is declared by the manufacture.