

RF EXPOSURE STATEMENT

1. LIMITS

According to §1.1310 and §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/ f ²)	30
30 - 300.....	27.5	0.073	0.2	30
300 - 1500.....	f/1500	30
1500 - 100.000.....	1.0	30

F = frequency in MHz

* = Plane-wave equivalent power density

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

S = Power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

2-1 Limit (WLAN DTS 802.11b)

Max Peak output Power at antenna input terminal	21.8100	dBm
Max Peak output Power at antenna input terminal	151.705	mW
Prediction distance	20.0000	cm
Prediction frequency	2462.000	MHz
Antenna Gain(typical)	2.3000	dBi
Antenna Gain(numeric)	1.69824	-
Power density at prediction frequency(S)	0.051254	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²

2-2 Limit (WLAN DTS 802.11g)

Max Peak output Power at antenna input terminal	21.3000	dBm
Max Peak output Power at antenna input terminal	134.896	mW
Prediction distance	20.0000	cm
Prediction frequency	2462.000	MHz
Antenna Gain(typical)	2.3000	dBi
Antenna Gain(numeric)	1.69824	-
Power density at prediction frequency(S)	0.45575	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²

2-3 Limit (WLAN DTS 802.11n)

Max Peak output Power at antenna input terminal	19.0100	dBm
Max Peak output Power at antenna input terminal	79.616	mW
Prediction distance	20.000	cm
Prediction frequency	2462.000	MHz
Antenna Gain(typical)	2.3000	dBi
Antenna Gain(numeric)	1.69824	-
Power density at prediction frequency(S)	0.026899	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²