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

2-1-1 800 MHz BAND

Max Average output Power at antenna input terminal	10.000	dBm
Max Average output Power at antenna input terminal	10.000	mW
Prediction distance	20.000	cm
Prediction frequency	862.000	MHz
Antenna Gain(typical)	1.500	dBi
Antenna Gain(numeric)	1.4125	-
Power density at prediction frequency(S)	0.00281	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.575	mW/cm^2

2-1-2 1900 MHz BAND

Max Average output Power at antenna input terminal	10.000	dBm
Max Average output Power at antenna input terminal	10.000	mW
Prediction distance	20.0000	cm
Prediction frequency	1930.0000	MHz
Antenna Gain(typical)	3.50000	dBi
Antenna Gain(numeric)	2.23872	-
Power density at prediction frequency(S)	0.004454	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2

2-1-3 BT BAND

Max Peak output Power at antenna input terminal	2.7000	dBm
Max Peak output Power at antenna input terminal	1.862	mW
Prediction distance	20.0000	cm
Prediction frequency	2441.0000	MHz
Antenna Gain(typical)	1.99000	dBi
Antenna Gain(numeric)	1.58125	-
Power density at prediction frequency(S)	0.000586	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2

3. Multiple radio MPE Factor

1) 800MHz and BT
(0.00281/0.575)+(0.000586/1.0000) = 0.004887+ 0.000586 = 0.005473 < 1.0 mW

2) 1900MHz and BT
(0.004454/1.0000)+ (0.000586/1.0000) = 0.004454 + 0.000586 = 0.00504 < 1.0 mW

⇨ Therefore, the worst-case situation is (0.00281/0.575)+(0.000586/1.0000)= 0.05473, which is less than "1"
This confirmed that the device comply with fcc 1.1310 MPE Limit.