

## 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 <sup>2</sup> )	Averaging time (minutes)
0.3 - 1.34	614	1.63	*(100)	30
1.34 - 30	824/f	2.19/f	*(180/ f <sup>2</sup> )	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

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

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

Max Average output Power at antenna input terminal	32.000	dBm
Max Average output Power at antenna input terminal	1584.893	mW
Prediction distance	50.000	cm
Prediction frequency	851.000	MHz
Antenna Gain(typical)	2.000	dBi
Antenna Gain(numeric)	2.0	-
Power density at prediction frequency( S)	0.07996	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	0.567	mW/cm <sup>2</sup>

## 3. RESULTS

The power density level at 50 cm is 0.07996 mW/cm<sup>2</sup>, which is below the uncontrolled exposure limit of 0.567 mW/cm<sup>2</sup>

Note: "RF exposure will be addressed at time of installation and the use of higher gain antennas may require larger separation distances."