**Prediction of MPE limit at a given distance**

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

where: S = power density
P = power input to the 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

| | | |
|---|---|---|
| Maximum peak output power at antenna input terminal: | 28.50 | (dBm) |
| Maximum peak output power at antenna input terminal: | 707.9457844 | (mW) |
| Antenna gain(typical): | 3.3 | (dBi) |
| Maximum antenna gain: | 2.13796209 | (numeric) |
| Prediction distance: | 20 | (cm) |
| Prediction frequency: | 824 | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 0.533333333 | (mW/cm^2) |
| Power density at prediction frequency: | 0.301113 | (mW/cm^2) |
| Maximum allowable antenna gain: | 5.782685833 | (dBi) |

**The maximum allowable antenna gain for this device(assuming 0 dB cable loss) would be 5.8 dBi. This device should be usedonly in devices that can be classified as Mobile(a separation distance of at least 20 cm from nearby persons.**