

## 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:         | <u>30.00</u> (dBm) |
|--|--------------------|
| Maximum peak output power at antenna input terminal:         | <u>1000</u> (mW)   |
| Antenna gain(typical):                                       | 7.86 (dBi)         |
| Maximum antenna gain:  | 6.10942 (numeric)  |
| Prediction distance:   | <u>31</u> (cm)     |
| Prediction frequency:  | 866 (MHz)          |
| MPE limit for uncontrolled exposure at prediction frequency: | 0.533333 (mW/cm^2) |

Power density at prediction frequency: 0.505902 (mW/cm^2)