

## 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

 $\mathsf{R}$  = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	<u>29.80</u> (dBm)
Maximum peak output power at antenna input terminal:	954.992586 (mW)
Antenna gain(typical):	10 (dBi)
Maximum antenna gain:	10 (numeric)
Time Averaging:	100 (%)
Prediction distance:	<u>20</u> (cm)
Prediction frequency:	927.6 (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.60 (mW/cm^2)
Power density at prediction frequency:	1.899897 (mW/cm^2)
	18.99897384 W/m^2

Margin of compliance:

Power will need to be attenuated either internally or externally to comply with EIRP limit of 36 dBm (4 Watts) when using antennas 2, 3 or 4. The device is professionally installed.

5.0 (dB)