

### 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 the antenna terminal:	<u>20.17</u>	(dBm)
Maximum peak output power at the antenna terminal:	<u>103.9920166</u>	(mW)
Antenna gain(typical):	<u>4.55</u>	(dBi)
Maximum antenna gain:	<u>2.851018268</u>	(numeric)
Prediction distance:	<u>20</u>	(cm)
Prediction frequency:	<u>902.7</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>0.607</u>	(mW/cm <sup>2</sup> )
<b>Power density</b> at prediction frequency:	<b>0.058983</b>	(mW/cm <sup>2</sup> )
Maximum allowable antenna gain:	<b>14.67458546</b>	(dBi)