



### Prediction of MPE limit at a given distance

#### 18dBi Antenna

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: 21.00 (dBm)

Maximum peak output power at antenna input terminal: 125.8925412 (mW)

Antenna gain(typical): 18 (dBi)

Maximum antenna gain: 63.09573445 (numeric)

Prediction distance: 50 (cm)

Prediction frequency: 5725 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm<sup>2</sup>)

Power density at prediction frequency: **0.252843** (mW/cm<sup>2</sup>)

Maximum allowable antenna gain: **23.97149873** (dBi)

Margin of Compliance: 5.971498727