

## 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

Valid for frequencies from 30 to 100.000 MHz

Maximum peak output power at antenna input terminal: 20,00 (dBm)

Maximum peak output power at antenna input terminal: 100 (mW)

Antenna gain(typical): 1,20 (dBi)

Maximum antenna gain: 1,318256739 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 1925 (MHz)

Power density at prediction frequency: 0,026226 (mW/cm^2)

Maximum allowable antenna gain: 17,01 (dBi)

Margin of Compliance: 15,81 (dB)