

### 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 device output terminal: 18.07 (dBm)

Cable and Jumper loss 0.0 (dB)

Maximum peak output power at antenna input terminal: 18.07 (dBm)

Maximum peak output power at antenna input terminal: 64.12095766 (mW)

Antenna gain: 7 (dBi)

Maximum antenna gain: 5.011872336 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 5300 (MHz)

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

Power density at prediction frequency: 0.063934 (mW/cm<sup>2</sup>)  
0.639337 (W/m<sup>2</sup>)

Tx On time: 1.000000

Tx period time: 1.000000

Average Factor: 100.000000

Average Power density at prediction frequency: 0.639337 (W/m<sup>2</sup>)

Maximum allowable antenna gain: 18.94269855 (dBi)

Margin of Compliance: 11.94269855 dB

