

## 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: 3.35 dBm

Cable and Jumper loss: 0.0 dB

Maximum peak output power at antenna input terminal: 3.35 dBm

.162718524 mW

2.15 dBi Single Antenna gain (typical):

Number of Antennae:

Total Antenna gain (typical): 2.15 dBi 1.640589773 (numeric)

Prediction distance: 20 cm

Prediction frequency: 2405 MHz

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

> Power density at prediction frequency: 0.000706 mW/cm<sup>2</sup>

> > 0.007059 W/m<sup>2</sup>

Tx On time: 1.000000 ms Tx period time: 1.000000 ms

Average Factor: 100.000000 %

0.007059 W/m<sup>2</sup> Average Power density at prediction frequency:

Maximum allowable antenna gain: 33.66269855 dBi

Margin of Compliance: 31.51269855 dB