

## 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: 33.46 dBm

Cable and Jumper loss: 0.0 dB

Maximum peak output power at antenna input terminal: 33.46 dBm 2218.19642 mW

Single Antenna gain (typical): 30 dBi

Number of Antennae:

30 dBi Total Antenna gain (typical):

> 1000 (numeric) 590 cm Prediction distance:

Prediction frequency: 763 MHz

MPE limit for uncontrolled exposure at prediction frequency: 0.508666667 mW/cm<sup>2</sup>

0.507091 mW/cm<sup>2</sup> Power density at prediction frequency:

5.070912 W/m<sup>2</sup>

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

Average Factor: 100.000000 %

5.070912 W/m<sup>2</sup> Average Power density at prediction frequency:

Maximum allowable antenna gain: 30.01347166 dBi

Margin of Compliance: 0.013471662 dB