

## 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: 4.83 dBm

Cable and Jumper loss: 0.0 dB

Maximum peak output power at antenna input terminal: 4.83 dBm

3.040885026 mW

Single Antenna gain (typical): 34 dBi

Number of Antennae: 1

Total Antenna gain (typical): 34 dBi

<u>2511.886432</u> (numeric)

Prediction distance: 65 cm
Prediction frequency: 61775 MHz

MPE limit for uncontrolled exposure at prediction frequency: \_\_\_\_\_\_\_1 mW/cm<sup>2</sup>

Power density at prediction frequency: 0.143868 mW/cm<sup>2</sup>

1.438677 W/m<sup>2</sup>

Tx On time: 1.000000 ms
Tx period time: 1.000000 ms
Average Factor: 100.000000 %

Average Power density at prediction frequency: 1.438677 W/m<sup>2</sup>

Maximum allowable antenna gain: 42.42036577 dBi

Margin of Compliance: 8.420365773 dB