

## 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 =

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: \_\_\_\_\_\_ 19.00 dBm

Cable and Jumper loss: 0.0 dB

Maximum peak output power at antenna input terminal: 19.00 dBm

79.43282347 mW

Single Antenna gain (typical): 3.0 and 3.6 dBi

Number of Antennae: 2

Total Antenna gain (typical): 6.3 dBi
4.265795188 (numeric)

Prediction distance: 20 cm

Prediction frequency: 5795 MHz

MPE limit for uncontrolled exposure at prediction frequency:

1 mW/cm<sup>2</sup>

Power density at prediction frequency: 0.067411 mW/cm<sup>2</sup>

0.674109 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: 0.674109 W/m²

Maximum allowable antenna gain: 18.01269855 dBi

Margin of Compliance: 11.71269855 dB