

## 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: 31.61 dBm

Cable and Jumper loss: 0.0 dB

Maximum peak output power at antenna input terminal: 31.61 dBm

1448.771854 mW

Single Antenna gain (typical): 3.9 dBi

Number of Antennae: 1

Total Antenna gain (typical): 3.9 dBi

2.454708916 (numeric)

Prediction distance: 20 cm

Prediction frequency: 1626 MHz

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

**Power density at prediction frequency:** 0.707506 mW/cm<sup>2</sup>

7.075060 W/m<sup>2</sup>

Duty cycle: 50.000000 %

3.537530 W/m<sup>2</sup>

Average Power density at prediction frequency: 5.402698554 dBi

**Margin of Compliance:** 4.51299851 dB