

ONE WORLD OUR APPROVAL

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

Port 1 Port 0 Maximum peak output power at device output terminal: 20.2 dBm 20.2 Cable and Jumper loss: 0 0 dB Maximum peak output power at antenna input terminal: 20.2 20.2 dBm 104.7128548 104.7128548 mW Single Antenna gain (typical): 7 7 dBi Number of Antennae: 1 1 Total Antenna gain (typical): 7 dBi 5.011872336 5.011872336 (numeric) Prediction distance: 20 20 cm Prediction frequency: 3690 3690 MHz 1 mW/cm² MPE limit for uncontrolled exposure at prediction frequency:

Power density at prediction frequency: 0.104407127 0.104407127 mW/cm²

 1.044071268
 M/m²

 Tx On time:
 1
 1 ms

 Tx period time:
 1
 1 ms

 Average Factor:
 100
 100 %

Average Power density at prediction frequency: 1.044071268 1.044071268 W/m²

Margin of Compliance: