

## 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:	22.90 dBm
Cable and Jumper loss:	0.0 dB
Maximum peak output power at antenna input terminal:	22.90 dBm
	194.98 mW
Single Antenna gain (typical):	5.00 dBi
Number of Antennae:	1.00
Total Antenna gain (typical):	5.00 dBi
	3.16 (numeric)
Prediction distance:	20.00 cm
Prediction frequency:	2412.00 MHz
MPE limit for uncontrolled exposure at prediction frequency:	1.00 mW/cm <sup>2</sup>
	0.12 mW/cm <sup>2</sup>
	1.23 W/m <sup>2</sup>
Tx On time:	1.00 ms
Tx period time:	1.00 ms
Average Factor:	100.00 %
Average Power density at prediction frequency:	1.23 W/m <sup>2</sup>