

## 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:	37.94 dBm		(Combined)
Cable and Jumper loss:	0.0 dB		
Maximum peak output power at antenna input terminal:	37.94 dBm		
	6223.002852 mW		
Single Antenna gain (typical):	10 dBi		
Number of Antennae:	1		
Total Antenna gain (typical):	10 dBi		
	10 (numeric)		
Prediction distance:	80 cm		
Prediction frequency:	3690 MHz		
MPE limit for uncontrolled exposure at prediction frequency:	1 mW/cm <sup>2</sup>		
<b>Power density at prediction frequency:</b>	<b>0.773767 mW/cm<sup>2</sup></b>		
	7.737669 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:	7.737669 W/m <sup>2</sup>		
<b>Margin of Compliance:</b>	<b>1.11389838 dB</b>		