

## 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:	28.28 dBm	See note
Cable and Jumper loss:	1.0 dB	
Maximum peak output power at antenna input terminal:	27.28 dBm	
	534.7430081 mW	
Single Antenna gain (typical):	17 dBi	
Number of Antennae:	1	
Total Antenna gain (typical):	17 dBi	
	50.11872336 (numeric)	
Prediction distance:	50 cm	
Prediction frequency:	3680 MHz	
MPE limit for uncontrolled exposure at prediction frequency:	1 mW/cm <sup>2</sup>	
<b>Power density at prediction frequency: 0.853091 mW/cm<sup>2</sup></b>		
	8.530908 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:	8.530908 W/m <sup>2</sup>	
Maximum allowable antenna gain:	17.69004758 dBi	
<b>Margin of Compliance:</b>	<b>0.690047579 dB</b>	

Note: Aggregated power of two carries