

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:	<u>21.30</u>	(dBm)
Cable and Jumper loss	<u>0.5</u>	(dB)
Maximum peak output power at antenna input terminal:	<u>20.80</u>	(dBm)
Maximum peak output power at antenna input terminal:	<u>120.2264435</u>	(mW)
Single Antenna gain(typical):	<u>6.5</u>	(dBi)
Number of Antennae	<u>3</u>	
Total Antenna gain(typical):	<u>11.27121255</u>	(dBi)
Maximum antenna gain:	<u>13.40050776</u>	(numeric)
Prediction distance:	<u>20</u>	(cm)
Prediction frequency:	<u>5180</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>1</u>	(mW/cm ²)
Power density at prediction frequency:	<u>0.320517</u>	(mW/cm ²)
	<u>3.205172</u>	(W/m ²)
Tx On time:	<u>1.000000</u>	
Tx period time:	<u>1.000000</u>	
Average Factor:	<u>100.000000</u>	
Average Power density at prediction frequency:	<u>3.205172</u>	(W/m ²)
Maximum allowable antenna gain:	<u>16.21269855</u>	(dBi)
Margin of Compliance:	<u>4.941486006</u>	dB

