

17. MPE Calculations

Base Station Transceiver
MPE Calculation

Enter data only in yellow cells			
<u>Prediction of MPE limit at a given distance</u>			
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 antenna input terminal:	20.00	(dBm)
	Maximum peak output power at antenna input terminal:	100.000	(mW)
	Antenna gain(typical):	0	(dBi)
	Maximum antenna gain:	1.000	(numeric)
	Prediction distance:	20	(cm)
	Prediction frequency:	2400	(MHz)
	MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm ²)
	Power density at prediction frequency:	0.019894	(mW/cm ²)
	Maximum allowable antenna gain:	17.0	(dBi)
	Margin of Compliance at	20	cm =
		17.0	dB