

**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 the antenna terminal: -1.50 (dBm)  
Maximum peak output power at the antenna terminal: 0.707945784 (mW)  
Antenna gain(typical): 15 (dBi)  
Maximum antenna gain: 31.6227766 (numeric)  
Prediction distance: 20 (cm)  
Prediction frequency: 2450 (MHz)  
MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm<sup>2</sup>)

**Power density** at prediction frequency: **0.004454** (mW/cm<sup>2</sup>)  
With 5dBi antenna Power density at prediction frequency is lower : 0.000445 (mW/cm<sup>2</sup>)  
Unit complies with FCC's RF radiation exposure limits for general population as a mobile device.