

**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: 17.46 (dBm)  
 Maximum peak output power at the antenna terminal: 55.71857489 (mW)  
 Antenna gain(typical): 4.55 (dBi)  
 Maximum antenna gain: 2.851018268 (numeric)  
 Prediction distance: 20 (cm)  
 Prediction frequency: 902.7 (MHz)  
 MPE limit for uncontrolled exposure at prediction frequency: 0.6018 (mW/cm<sup>2</sup>)  
  
 Power density at prediction frequency: **0.031603** (mW/cm<sup>2</sup>)

Therefore device complies with FCC RF radiation exposure limits for general population in mobile exposure category (distance > 20cm)