

### 3.8 RF Exposure Compliance

The maximum measured antenna conducted power, P is 27.34dBm

The antenna gain, G is 6dBi

The maximum EIRP power = P + G

ERP = 27.34+ 6= 33.34dBm, or 2.158W

The limits for Maximum Permissible Exposure (MPE) for transmitter operating at 902-928MHz, MPE is 928/1500 = 0.619mW/cm<sup>2</sup>, or 6.2W/m<sup>2</sup>

The Power Density, S is related to EIRP with the equation:

$S = \text{EIRP} / 4\pi D^2$ , where D is the safe separation distance and = 0.2m, or 20cm

$S = 2.158 / 4\pi 0.2^2$ ,

$S = 4.29\text{mW/cm}^2$ , or below the Maximum Permissible Exposure (MPE) of 6.2W/m<sup>2</sup>