

RF Exposure Compliance

The maximum measured antenna conducted power, P is 153mW, or 22dBm

The antenna gain, G is 3dBi

The maximum EIRP power = P + G

ERP = 22+ 3= 25dBm, or 0.32W

The limits for Maximum Permissible Exposure (MPE) for transmitter operating at 902-928MHz, MPE is

$928/1500 = 0.619\text{mW/cm}^2$, or 6.2W/m^2

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

$S = 0.32 / 4\pi 0.2^2$,

$S = 0.64\text{W/cm}^2$, or below the Maximum Permissible Exposure (MPE)