

### 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

Device has 3 antenna options

Antenna 1	Linx Model ANT-916-JJB-ST	0dBi
Antenna 2	Nearson Model S161AM-915	2.5dBi
Antenna 3	SignalFire Model 9-4-ANT	5dBi

Maximum peak output power at the antenna terminal: 9.60 (dBm)

Maximum peak output power at the antenna terminal: 9.126410518 (mW)

Maximum Antenna Gain: 5 (dBi)

Maximum Antenna Gain: 3.16227766 (numeric)

Prediction Distance: 20 (cm)

Prediction Frequency: 915 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.6 (mW/cm<sup>2</sup>)

**Power density** at prediction frequency: **0.005742** (mW/cm<sup>2</sup>)

Therefore device complies with FCC and Industry Canada RF radiation exposure limits for general population as a mobile device (distance > 20cm)