Radio Frequency Radiation Exposure Evaluation for GigAccess Self Install GA_900_RSU

1. RF Hazard Distance Calculation

Limit for power density for general population /uncontrolled exposure is

0.604 mW/cm² (for 902MHz)

The Power density is given by:

P (mW/cm²)= PT /4π R²

Therefore:

R = Distance to the center of radiation antenna [cm]

(3) $$P_{dBm} = 10 \times \log P_{mW}$$

Therefore: (4 $$P_{mW} = 10^{\frac{P_{dBm}}{10}}$$

The hazard distances versus antenna gain are listed in Table 1-1.

Note! GigAccess™ 900 was designed for fixed and mobile applications.

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point-to-multi-point operation

Antenna Gain		Tx Power		Safe Distance	Sector Type
[dBi]	[Numeric]	[dBm]	[mW]	[cm]	
6	3.98	30	1000	**22.6**	p2mp

Table 1-1: Hazard Distance versus Antenna Gain for Point to Multi Point

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When using the system for point to multi point (p2mp) applications all outdoor units must be installed with a separation distance of at least **30 cm** from all persons during normal operation.
