

RF Exposure Calculations:

The following information provides the minimum separation distance for each of the antennas provided with the MHX-900 module, as calculated from **FCC OET 65 Appendix B, Table 1B** Guidelines for General Population/Uncontrolled Exposure. This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain. The formula used was:

$$S = (P_o * G) / (4 * \pi * r^2)$$

Where $S = 0.6 \text{ mW/cm}^2$ for 902 MHz (from F/1500)

Where $P_o = 100 \text{ mW}$ for Yagi antennas (max. power set at factory)

Where $P_o = 1.0 \text{ Watt}$ for Omni antennas (max. power user configurable)

For: 14 dB Yagi Antenna - Sinclabs - SUY-90213 $r = 18 \text{ cm}$
12 dB Yagi Antenna - Sinclabs - SUY-90211 $r = 15 \text{ cm}$
8 dB Yagi Antenna - Sinclabs - SUY-90207 $r = 9 \text{ cm}$
2.5 dB Omni Antenna - 900 MHz Rubber Ducky $r = 15 \text{ cm}$
5 dB Omni Antenna - Sinclabs $r = 20 \text{ cm}$

The following statement will be presented in the MHX-900 User Manual, page 27:

WARNING

In order to comply with the FCC adopted RF exposure requirements, this transmitter system will be installed by the manufacturer's resaler professional. Installation of the high gain yagi antennas must be performed in a manner that will provide at least 18 cm clearance from the front radiating apperature, to any personnel such as employee or member of the public.

Installation of the omni whip antennas must be performed in a manner that will provide at least 20 cm clearance from the whip, to any personnel such as

employee or member of the public.