

## **8.0 RF Exposure Statement:**

### **Notice in Installation Manual:**

### **FCC Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment, when installed as directed. This equipment should be installed and operated with fix-mounted antennas that are installed with a minimum of 2 meters of separation distance between the antenna and all persons' body during normal operation.

### **RF Exposure Calculations:**

The following information provides the **minimum** separation distance for the highest gain antenna provided with the EUT, 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, and considering a 0.6 mW/cm<sup>2</sup> uncontrolled exposure limit. The Friss formula used was:

$$S = (P_o * G) / (4 * \pi * r^2) \quad \text{or} \quad r = \sqrt{(P_o * G) / (4 * \pi * S)}$$

**Where**        **S = 0.6 mW/cm<sup>2</sup> for 902 MHz (902 / 1500)**

**Where**        **P<sub>o</sub> = 100 mW Peak for Yagi antennas, and 1000 mW for Omni Antennas**

**Where**        **G= Isotropic antenna gain (numeric)**

**Where**        **r= Minimum Safe Distance from antenna (cm)**

**For: 12 dB Yagi Antenna        r = 14 cm**

**2.5dB Omni Antenna        r = 15 cm**

**6 dB Omni Antenna        r = 23 cm**

## RF Exposure Table For Antennas Used With This Equipment

Antenna Type	Gain (dBi)	Numeric Gain	Channel	Peak Output Power (mW)	Calculated Distance (cm)	Minimum RF Exposure Separation Distance (cm)
Yagi	12	16	1	100	14	20
Yagi	11	13	1	100	13	20
Omni	6	4	1	1000	23	23
Omni	2.5	1.8	1	1000	16	20