

RF Exposure information

The control panel transmitter operates according to FCC part 15 subpart C section 15.231(a) and RSS-210 Annex 1. The standards do not contain RF Exposure limits. The panel includes a single modular approved transmitter FCC ID:RI7HE910NA, IC:5131A- HE910NA.

The power density $P \text{ (mW/cm}^2\text{)} = P_T / 4\pi r^2$

Maximum conducted output power given in FCC ID:RI7HE910NA module grant is 1648 mW (32.17 dBm) in 824.2-848.8 band. Limit for power density is $f/1500 = 0.56 \text{ mW/cm}^2$ for 824-849 MHz for general population/uncontrolled exposure.

The gain of antenna used with the module in the control panel is – 5 dBi.

The maximum equivalent isotropically radiated power EIRP is

$$P_T = 32.17 \text{ dBm} - 5 \text{ dBi} = 27.17 \text{ dBm} = 521.2 \text{ mW}$$

The power density at 20 cm is calculated as follows:

$$521.2 \text{ mW} / 4\pi (20 \text{ cm})^2 = 0.1 \text{ mW/cm}^2 < 0.56 \text{ mW/cm}^2$$

General public cannot be exposed to dangerous RF level.