

RF Exposure information

The control unit is classified as a mobile device. The control unit includes transmitters operating according to FCC part 15 subpart C section 15.231 and section 15.247 (DTS).

The standard section 15.231 does not contain RF Exposure limits.

The FCC power density limit for general population/uncontrolled exposure is 1 mW/cm² for 2.4 GHz.

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

P_T is the transmitted power, which is equal to the peak transmitter output power -11.99 dBm plus maximum antenna gain 4.5 dBi, the maximum equivalent isotropically radiated power EIRP is

$$P_T = -11.99 \text{ dBm} + 4.5 \text{ dBi} = -7.49 \text{ dBm} = 0.18 \text{ mW}.$$

The power density at 20 cm (minimum safe distance, required for mobile devices), calculated as follows:

$$0.18 \text{ mW} / 4\pi (20 \text{ cm})^2 = 3.6 \times 10^{-5} \text{ mW/cm}^2 \ll 1 \text{ mW/cm}^2$$

General public cannot be exposed to dangerous RF level.