The Device is a carrier grade gateway designed for IoT applications. The device is intended to be installed in controlled area (overhead cable, stranded-mounted) with restricted access to general public. The installation and maintenance must be performed by professional trained RF technician.

The device has 2 transmitter antenna ports, which must be used with antenna respecting the requirement specified in the technical documentation.

Per OET Bulletin 65 Edition 97-01, Appendix A Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	**Controlled Exposure (table 1 A) Power Density 'S' (mW/cm^2)**	**Uncontrolled Exposure (table 1 B) Power Density 'S' (mW/cm^2)**
300-1500	f/300	f/1500

We are using the lowest transmitter frequency for worst case calculation: **923.3 MHz**

S = 0.616 mW/cm^2, for uncontrolled exposure

S = 3.078 mW/cm^2, for controlled exposure

The table below shows the worst calculated EIRP value from the conducted power measurement from the test report in section 2.2.5.

Antenna ID	**Frequency (MHz)**	**Corrected Reading (dBm)**	**RF Output (Watts)**	**Duty cycle (ratio)**	**Avg Power (dBm)**	**Cable loss (dB)**	**Max. antenna gain (dBi)**	**Avg EIRP (dBm)**	**Avg EIRP (mW)**
1	923.3 + 924.5	29.93	0.98	1	29.93	0	6	35.93	3917

And with the equation (4) from the OET bulletin 65,

$S = EIRP / (4 \pi R^2)$

Where: S, power density in 'mW/cm^2'
EIRP, Effective Isotropic Radiated Power in 'mW'
R, distance to the center of the radiation of the antenna in 'cm'

and then re-arrange to determine the minimum safe distance.

$R = \sqrt{[EIRP / (4 \pi S)]}$

R = 22.5 cm, for uncontrolled exposure (rounded up to the first decimal)

R = 10.1 cm, for controlled exposure (rounded up to the first decimal)