

FCC Maximum Permissible Exposure (MPE) limits for equipment operating in the frequency range 1500 – 100,000 MHz is 1.0 mW/cm².

Following installation and commissioning, the safe distance from the antenna is the greater of:

20cm

Or

r cm, where $r = \sqrt{PG/4\pi S}$

P: power input to antenna(s) in mW

G: numeric gain of antenna relative to isotropic radiator

S: power density in mW/cm² = 1 mW/cm²

The safe distance from the antenna shall be the greater of:

20 cm or $\sqrt{PG/4\pi S}$

Sensor

$P \cdot G = 0.80$ dBm or 1.2 mW EIRP

$\sqrt{PG/4\pi S} = 0.309$ cm

Safe distance is 20 cm

Gateway

$P \cdot G = 12.67$ dBm or 18.5 mW EIRP

$\sqrt{PG/4\pi S} = 1.21$ cm

Safe distance is 20 cm