

**Environmental evaluation and exposure limit according to FCC CFR 47part 1,
§1.1307, §1.1310**

The calculation was done for required safe distance (the device is classified as fixed).

Limit for power density for general population/uncontrolled exposure is 1 mW/cm² for 1500 -100000 MHz frequency range:

The power density P (mW/cm²) = $P_T / 4\pi r^2$, where

P_T is the maximum equivalent isotropically radiated power (EIRP).

The peak output power of 18.01 dBm with 18 dBi antenna gain corresponds to the equivalent isotropically radiated power (EIRP) of

18.01 dBm + 18 dBi = 36.01 dBm, which is equal to 3990 mW.

The minimum safe distance "r", where RF exposure does not exceed FCC permissible limit, is

$$r = \sqrt{P_T / (P \times 4\pi)} = \sqrt{3990 / 12.56} = 17.8 \text{ cm} \ll 2 \text{ m} .$$