

MPE Calculations

The device is not a portable device (i.e. intended to be worn on the body or be hand-held), so it is classified as being either a mobile device or a fixed mounted device. The user's manual specifies a minimum separation distance of at least 20cm, consistent with this classification.

FCC part 1.1310, Table 1 limits the power density for uncontrolled exposure. The power density, P_d (mW/cm^2) calculated from the maximum EIRP, P_t (mW) and the distance, d (m), between the transmitting antenna and the closest person, can be calculated using:

$$P_d = P_t / (4 \pi d^2)$$

Frequency	MPE Limit (mW/cm^2)	Output Power (mW)	Max. Antenna Gain (dBi)	EIRP (mW)	Pd at 20cm (mW/cm^2)	Distance where Pd = limit (cm)
2412 to 2462 MHz	1.00	69.2	2.7	128.8	0.03	3.2
5745 to 5825 MHz	1.00	162.2	3.4	354.8	0.07	5.3
5180 to 5320 MHz	1.00	70.8 ¹	4.0	177.8	0.04	3.8
5280 to 5320 MHz	1.00	70.8 ¹	4.0	177.8	0.04	3.8

As shown in the calculations above, the power density 20cm from the device is below the maximum permitted level for uncontrolled exposure.

¹ Based on the average power measured using an average power sensor.