

MPE Calculations / RF Exposure Brief

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 a mobile device. The manual specifies a minimum separation distance of at least 20cm when installed into host systems, 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	117.5 (Note 1)	3.2	245.5	0.05	4.4
5150 to 5250 MHz	1.00	32.4	3.7	75.9	0.02	2.5
5250 to 5350 MHz	1.00	28.8	3.7	67.6	0.01	2.3
5470 to 5725 MHz	1.00	33.9	4.8	102.3	0.02	2.9
5725 to 5850 MHz	1.00	134.9 (Note 1)	5.0	426.6	0.08	5.8
Note 1: Power is peak power, not average power.						

As shown in the calculations above, which use the highest powers measured in each band as reported in the associated rf report, the power density 20cm from the device is below the maximum permitted level for uncontrolled exposure.