

FCC Part – 2.1093 Radiofrequency Radiation Exposure evaluation: portable devices.

The Personnel Alert badge operates below the Limits for Occupational/Controlled exposure as per Section 2.1093(1).

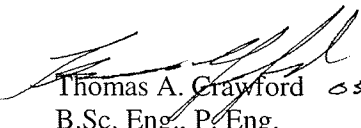
The Personnel Alert badge transmitter has a peak power output of 15 dBm at it's antenna port, the Linx technologies Model No. ANT-916-PW-LP provides 2.1 dB gain, therefore the EIRP is (nominal) 51.3 mW peak, the actual power envelope is much lower due to the frequency hopping of the system.

The 51.3 mW peak is far below the allowable maximum of 409.82 mW, low threshold at close proximity, and 983.60 mW high threshold at ≥ 2.5 cm as evaluated at the center frequency of the 902-928 operational band.

The Calculation is:

$$375/f_{\text{GHz}} \text{ mW, } d < 2.5 \text{ cm} = 375/0.915 \text{ GHz} = 409.82 \text{ mW, } 26.13 \text{ dBm.}$$

$$900/f_{\text{GHz}} \text{ mW, } d < 2.5 \text{ cm} = 375/0.915 \text{ GHz} = 983.60 \text{ mW, } 29.93 \text{ dBm}$$


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