

Casambi Technologies Oy

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RF Exposure Analysis

FCC ID: 2ALA3-XPRESS

Analysis for FCC portable use

Standalone SAR test exclusion considerations are defined in KDB 447498 D01, Chapter 4.3.1 where the 1-g head or body and 10-g extremity SAR exclusion threshold is defined by the following formula:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

For the Casambi Technologies Oy, Xpress, the maximum conducted output power is +3.5dBm (2.2mW) at 2.45GHz

Applying the above data using the given KDB 447498 D01 formula, and minimum separation distance of 5mm, the following results:

$$(2.2\text{mW} / 5 \text{ mm}) * \sqrt{2.45 \text{ GHz}} = 0.7$$

(i.e.: ≤ 7.5 for 10-g extremity SAR)

Conclusion

This demonstrates the Xpress meets the criteria for 10-g extremity SAR test exemption.

Signature: _____



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