

RF Exposure Analysis

FCC ID: 2A13601

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:

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

- f(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 Snuza (Pty) Ltd Pico, the maximum conducted output power is 10.0dBm (10mW) at 2.4GHz

Two scenarios are considered:

1. Body SAR with a separation distance of 10mm (device attached to the Baby's diaper)
2. Extremity SAR with a separation distance of 5mm (the Baby's hand touching the device)

1/. Body SAR with a separation distance of 10mm

Applying the above data using the given KDB 447498 D01 formula, and minimum separation distance of 10mm, the following results:

$$(10.0\text{mW} / 10.0 \text{ mm}^*) \cdot \sqrt{2.4 \text{ GHz}} = 1.55$$

* 10.567 is the smallest antenna separation distance to the body, See Annex A. The value is rounded down to 10.0mm to provide a more conservative separation distance given the use of the device.

(i.e.: ≤ 3.0 for 1-g SAR)

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2/. Extremity SAR with a separation distance of 5mm

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

$$(10.0\text{mW} / 5.0 \text{ mm}) \times \sqrt{2.4 \text{ GHz}} = 3.1$$

(i.e.: ≤ 7.5 for 10-g extremity SAR)

Conclusion

This demonstrates the Snuza (Pty) Ltd Pico meets the criteria for 1-g head / body at a 10mm separation distance and 10-g extremity SAR test exemption at a separation distance of 5mm.

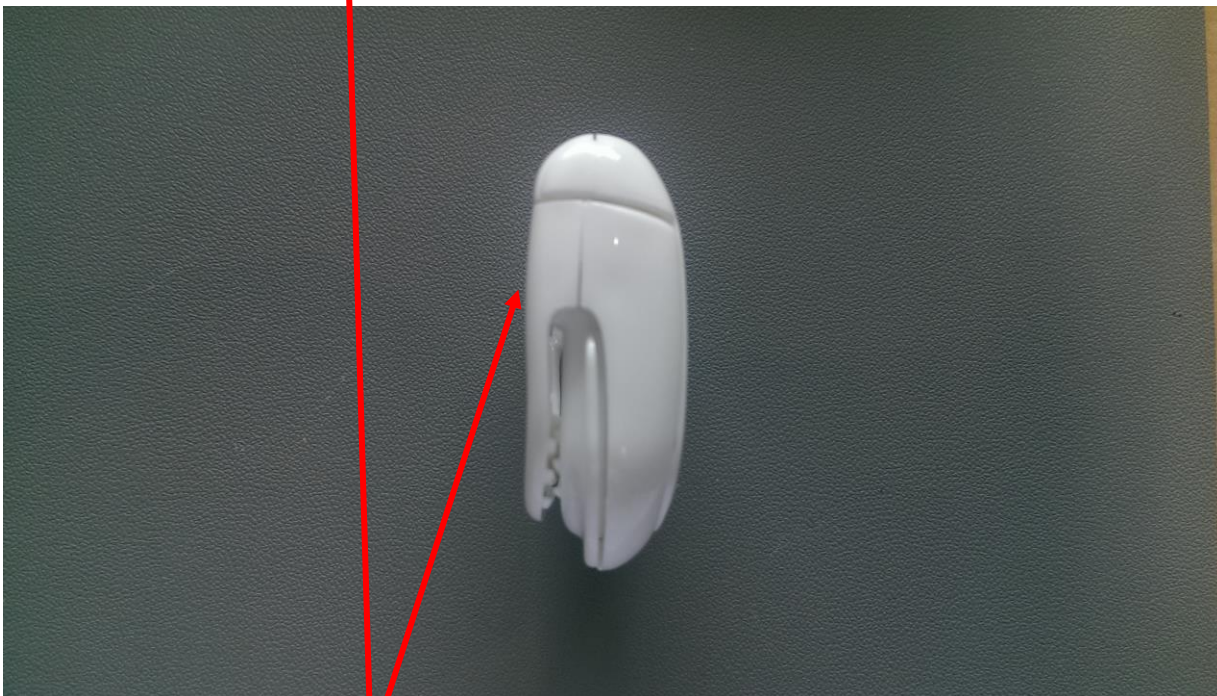
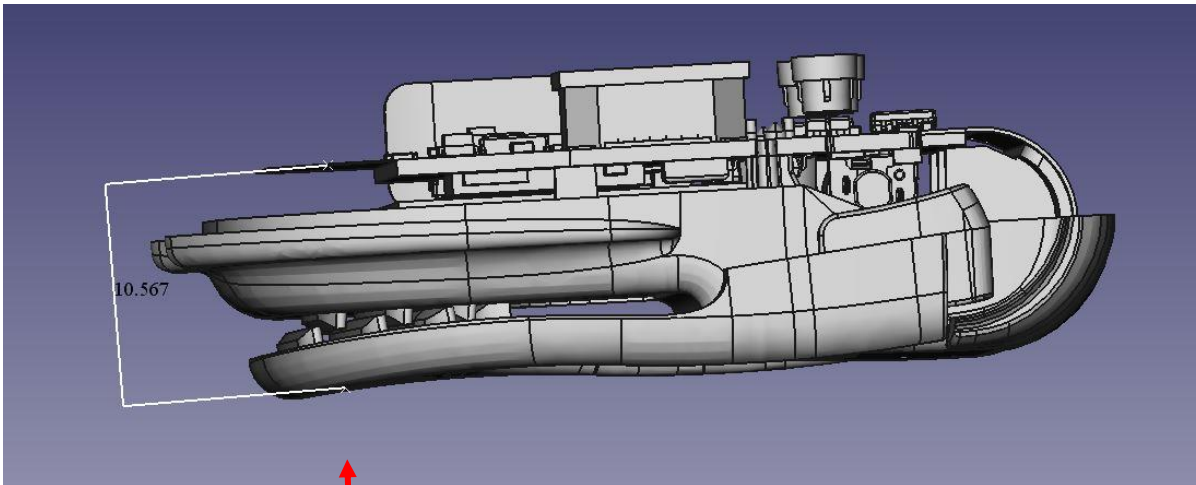


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Annex A: Antenna Separation



This side is touching the body