

FCC SAR exemption letter according KDB 447498 D01 v06

Customer	Product	Model	Type	HW status	SW status
Bosch Healthcare Solutions GmbH Stuttgarter Str. 130 71332 Waiblingen Germany	System for quantitative measurement of fractional nitric oxide (FeNO) in human breath	Vivatmo pro (Handheld)	-	F09G1000 78	Prod_Test.hex Version 3.0.10.1

Declared minimum distance to human body according to customer = 0 cm according external document "MPE Information Requirements FCC Handheld_v2_updated.pdf" provided by customer.

According to KDB 447498 D01 General RF Exposure Guidance V06 SAR testing can be exempted if the following exclusion threshold are met:

4.3. General SAR test exclusion guidance

4.3.1. Standalone SAR test exclusion considerations

- a) For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{GHz}}}] \leq 3.0 \text{ for 1-g SAR, and } \leq 7.5 \text{ for 10-g extremity SAR,}^{30} \text{ where}$$

- f_{GHz} is the RF channel transmit frequency in GHz.
- Power and distance are rounded to the nearest mW and mm before calculation³¹
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as *numeric thresholds* in step b) below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

Calculation based on external document "MPE Information Requirements FCC Handheld_v2_updated.pdf".

FCC General SAR test exclusion acc. KDB 447498 D01 v06					
Frequency (MHz)	Max. power incl. Tune-up tolerance (mW)	Threshold 1-g SAR Limit < 3.0	Threshold 10-g SAR Limit < 7.5	1-G SAR Exemption fulfilled	10-g SAR Exemption fulfilled
2402.0	1.2190	0.3779	0.3779	yes	yes
2440.0	1.2023	0.3756	0.3756	yes	yes
2480.0	1.1668	0.3675	0.3675	yes	yes

The user manual must list the given usage position.

The current version of the exemption letter 19-1-0137401T03c-C1 replaces the exemption letter 19-1-0137401T03c dated 2021-May-04. The replaced exemption letter is herewith invalid.

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Version	Applied changes	Date of release
--	Initial release	2021-May-04
C1	Safety distance corrected to 0mm, BLE frequencies corrected	2021-June-01