

RF Exposure Assessment

Product	Tag-50X
Name and address of the applicant	Sonitor Technologies AS Drammensveien 288 0273 Oslo, Norway
Name and address of the manufacturer	Sonitor Technologies AS Drammensveien 288 0273 Oslo, Norway
Model	Tag-M50X
Rating	Internal battery: 3V
Trademark	Sonitor
Additional information	Bluetooth Low Energy 2402-2480 MHz
Evaluated according to	FCC Part 1.1307(b) RF Exposure Assessment FCC KDB 447498 D01 v06 General RF Exposure Guidance
Order number	PRJ0072858
Issue date	2025-09-01
Name and address of the testing laboratory	<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="text-align: center;">  Nemko Scandinavia AS Instituttveien 6 2007 Kjeller, Norway www.nemko.com </div> <div style="text-align: center;"> CAB Number: FCC: NO0001 ISED: NO0470 ISED No: 2040D-1 </div> <div style="text-align: center;">   </div> </div> <p style="text-align: center; color: red; font-weight: bold;">An accredited technical test executed under the Norwegian accreditation scheme</p>
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;">  Prepared by [Jan Gunnar Eriksen] </div> <div style="width: 45%; text-align: center;"> Prepared by [] </div> </div>	
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Revision history

Revision	Date	Comment	Sign
A	2025-09-11	First Edition	JGER

GENERAL REMARKS

This report applies only to the sample(s) tested. It is the manufacturer's responsibility to ensure the additional production units of this product are manufactured with identical electrical and mechanical components. The manufacturer is solely responsible for any modifications to the product that could result in non-compliance with the relevant regulations.

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1 Exposure Evaluation

1.1 EUT Technical Information

Product	Tag used in real time location systems
Manufacturer	Sonitor Technologies AS
Model	Tag-M500, Tag-M501, Tag-M503
FCC ID	2AD7T11124102301
Hardware version	-
Software version	-
Frequency Range	2402 – 2480 MHz
Type of Power Supply	Internal Battery, 3V
Antenna Type	Integral
Number of Antennas	1
Output Power	2.9 mW
Type of Portable Device	Tag for communication with a gateway on Bluetooth Low Energy
Reference to RF Test Report	REP088039

1.2 Evaluation Summary

The EUT has been evaluated and found to be exempt from SAR Evaluation according to the Exemption Criteria in KDB 447498 D01 General RF Exposure Guidance v06, Clause 4.3 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:

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

- f_{GHz} is the RF channel transmit frequency in GHz

Determination of Exemption for Single RF Sources			
Output Power, Conducted	@ 2402 MHz	2.9	mW *)
Output Power, Radiated	@ 2440 MHz	2.3	mW **)
Separation Distance d (mm)(valid for $d \leq 40$ cm)	d (mm)	5	mm
Frequency f (GHz) (valid for $f \geq 300$ MHz and $f \leq 6$ GHz)	f (GHz)	2.48	GHz
Formula above ($2.9 / 5.0 \times \text{SQRT}(2.48)$) [mW / mm x SQRT (GHz)]		0.9	≤ 3.0
Test Exclusion Threshold for 1-g SAR		3.0	
Verdict:		EXEMPTED	

NOTE: *) Maximum measured value

**) Calculated from measured field strength using the method described in ANSI C63.10-2013 Annex G @ 3 meters distance

Output Power and Field Strength values are from Nemko Test Report REP088039.

The evaluation is valid at the declared separation distance of 5mm.