

# FCC SAR Exemption Per KDB 447898


## KDB 447498 D01 General RF Exposure Guidance v06 (October 23, 2015)

### 1. Declaration of RF exposure compliance for exemption from routine evaluation limits

NEX	404085
Model number:	SurgiCount+Cradle Model: 0694-002-002
Manufacturer:	Stryker
4.3.1. Standalone SAR test exclusion considerations:	<p>During normal operation, user extremities can come within 20 cm of the internal antenna and therefore product is considered as “Portable”.</p> <p>The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at Test separation distances <math>\leq 50</math> mm are determined by:  <math display="block">[(\text{max. power of channel, including tune-up tolerance, mW}) \div (\text{min. test separation distance, mm})] \times [\sqrt{F(\text{GHz})}] \leq 3.0</math> for 1-g SAR and <math>\leq 7.5</math> for 10-g extremity SAR, where</p> <p>For 100 MHz to 6 GHz and test separation distances <math>&gt; 50</math> mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following (also illustrated in Appendix B):</p> <ol style="list-style-type: none"> <li>1) <math>\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)]\}</math> mW, for 100 MHz to 1500 MHz</li> <li>2) <math>\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot 10]\}</math> mW, for <math>&gt; 1500</math> MHz and <math>\leq 6</math> GHz</li> </ol> <p>For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):</p> <ol style="list-style-type: none"> <li>1) For test separation distances <math>&gt; 50</math> mm and <math>&lt; 200</math> mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by <math>[1 + \log(100/f(\text{MHz}))]</math></li> <li>2) For test separation distances <math>\leq 50</math> mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by <math>\frac{1}{2}</math></li> <li>3) SAR measurement procedures are not established below 100 MHz</li> </ol> <p>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</p> <p>Calculation based on the above formula:                      Separation Distance = 5 mm                      EIRP Output Power = 44.81 dB<math>\mu</math>V/m = -50.72 dBm = 8.5 e-6 mW                      Frequency = 13.56 MHz</p> <p>4.3.1 c) 2) = .5                      4.3.1 c) 1) = <math>[1 + \log(100/f_{\text{MHz}})] = 1.87</math>                      4.3.1 b) 1) = for 50mm and 100MHz per 4.3.1 c) 2) the result of b) 1) = 0</p> <p><b>Final Result</b>  <b>Calculation = <math>.0.934 \times ((0.0000085 \div 5) \times \sqrt{0.1356}) = 0.184 \text{ e-9} &lt; 3 \text{ or } 7.5</math></b></p> <p><b>The calculation is below the threshold, therefore the product exempt from the SAR test requirements</b></p>

## 2. Attestation

ATTESTATION: I attest that the testing was performed or supervised by me; that the test measurements were made in accordance with the above-mentioned departmental standard(s), and that the radio equipment identified in this application has been subject to all applicable test conditions specified in the departmental standards and all of the requirements of the standards have been met.

Signature:	
Date:	June 9, 2021
Name:	Chip Fleury, RF supervisor and Certification supervisor