1. RF EXPOSURE

1.1. Standard Applicable

According to§2.1093 this is a portable device.

For the radiation source included into the device, the output power is taken from a corresponding RF test report. If need be, the output power is converted to source-based time–average out power. Finally the output power is compared to FCC and IC low power SAR evaluation exemption level.

FCC SAR test exclusion:

According to KDB 447498 D01 V5, Appendix A: SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm, the thresholds power level is 10mW (10dBm) at 5 mm.

The 1-g and 10-g SAR test exclusion thresholds for 100MHz to 6GHz at test separation distance <= 50mm are determined by

$$\frac{max.\ power\ of\ channel\ [mW]}{min.\ test\ separation\ distance\ [mm]} \cdot \sqrt{f[GHz]} \leq \begin{cases} 3.0 & 1g\ SAR \\ 7.5 & 10g\ SAR \end{cases}$$

- 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 comparision

IC Exemption from Routine Evaluation Limits – SAR Evaluation: RSS 102 Issue 4

SAR evaluation is required if the separation distance between the user and the radiating element of the device is less than or equal to 20 cm, except when the device operates as follows:

above 2.2 GHz and up to 3 GHz inclusively, and with output power (i.e. the higher of the conducted or radiated (e.i.r.p.) source-based, time-averaged output power) that is less than or equal to 20 mW for general public use and 100 mW for controlled use;

1.2. Measurement Result:

The Measured Max. peak output power is -0.67dBm (0.857 mW), which is lower than the threshold power level 10 mW at 5mm (KDB 447498 D01 V5, Appendix A) in general population category；and 20mW in RSS 102 issue 4.

The SAR measurement is not necessary.