

RF Exposure Requirements

Product Description: wireless mouse

Model No.: G12, M1L, M1LBS, Q5, G16, G18, M2, K6, T12, M101, V7, T18, N01, X96, T85,

U03, C10, C12, C24, Q18, Q16, G5, G9, G10, G15, T8, T5, M303, T56, T302, T16, T9, U9

FCC ID: 2A49E-G12

According to the KDB 447498 D01 v06 section 4.3.1, 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:

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

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz

- Power and distance are rounded to the nearest mW and mm before calculation¹⁷

- The result is rounded to one decimal place for comparison

Calculation Result:

For SRD:

Tx frequency range: 2408MHz-2474MHz

Min. test separation distance: 5mm

Max. Field Strength: 83.32dBuV/m @3m

$\text{EIRP} = \text{E} - 104.8 + 20\log D = 83.32 - 104.8 + 20\log 3 = -11.94\text{dBm}$

Maximum Conducted Output Power: -11.94dBm

Tune-Up output power: -11dBm

RF channel transmit frequency: 2474MHz

Result: 0.1

Limit: 3.0

The exclusion thresholds is $0.1 < 3$

So the transmitter complies with the RF exposure requirements and the SAR is not required.