

## FCC ID: S7JM881LVP

### Portable device

According to §15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to KDB447498 D01 General RF Exposure Guidance V05

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

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

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;

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  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 is applied to determine SAR test exclusion.

We use 5mm as separation distance to calculated.

Maximum measured transmitter power:

Bluetooth 4.0 DSS:

| Transmit Frequency (GHz) | Mode           | Measured Power (dBm) | Tune-up power (dBm) | Max tune-up power(dBm) | Result calculation | 1-g SAR |
|--------------------------|----------------|----------------------|---------------------|------------------------|--------------------|---------|
| 2.402                    | GFSK           | 4.93                 | 5±1                 | 6                      | 1.2340             | 3.00    |
| 2.441                    | GFSK           | 5.954                | 5±1                 | 6                      | 1.2440             | 3.00    |
| 2.480                    | GFSK           | 5.748                | 5±1                 | 6                      | 1.2539             | 3.00    |
| 2.402                    | $\pi/4$ -DQPSK | 4.193                | 5±1                 | 6                      | 1.2340             | 3.00    |
| 2.441                    | $\pi/4$ -DQPSK | 5.232                | 5±1                 | 6                      | 1.2440             | 3.00    |
| 2.480                    | $\pi/4$ -DQPSK | 5.748                | 5±1                 | 6                      | 1.2539             | 3.00    |
| 2.402                    | 8DPSK          | 4.116                | 5±1                 | 6                      | 1.2340             | 3.00    |
| 2.441                    | 8DPSK          | 5.176                | 5±1                 | 6                      | 1.2440             | 3.00    |
| 2.480                    | 8DPSK          | 5.679                | 5±1                 | 6                      | 1.2539             | 3.00    |

Bluetooth 4.0 DTS:

| Transmit Frequency (GHz) | Mode | Measured Power (dBm) | Tune-up power (dBm) | Max tune-up power(dBm) | Result calculation | 1-g SAR |
|--------------------------|------|----------------------|---------------------|------------------------|--------------------|---------|
| 2.402                    | GFSK | -3.150               | -2.5±1              | -1.5                   | 0.2194             | 3.00    |
| 2.440                    | GFSK | -2.112               | -2.5±1              | -1.5                   | 0.2212             | 3.00    |
| 2.480                    | GFSK | -1.629               | -2.5±1              | -1.5                   | 0.2230             | 3.00    |

802.11b/g/n HT20/n HT40:

| Transmit Frequency (GHz) | Mode     | Max Conducted Power (dBm) | Tune-up power (dBm) | Max tune-up power(dBm) | Result calculation | 1-g SAR |
|--------------------------|----------|---------------------------|---------------------|------------------------|--------------------|---------|
| 2.412                    | 11b      | 9.4                       | 8.7±1               | 9.7                    | 2.8988             | 3       |
| 2.437                    | 11b      | 9.61                      | 8.7±1               | 9.7                    | 2.9138             | 3       |
| 2.462                    | 11b      | 9.63                      | 8.7±1               | 9.7                    | 2.9287             | 3       |
| 2.412                    | 11g      | 8.89                      | 8.5±1               | 9.5                    | 2.7683             | 3       |
| 2.437                    | 11g      | 9.17                      | 8.5±1               | 9.5                    | 2.7826             | 3       |
| 2.462                    | 11g      | 9.33                      | 8.5±1               | 9.5                    | 2.7969             | 3       |
| 2.412                    | 11n HT20 | 8.64                      | 8.2±1               | 9.2                    | 2.5836             | 3       |
| 2.437                    | 11n HT20 | 9.15                      | 8.2±1               | 9.2                    | 2.5969             | 3       |
| 2.462                    | 11n HT20 | 9.18                      | 8.2±1               | 9.2                    | 2.6102             | 3       |
| 2.422                    | 11n HT40 | 8.07                      | 8±1                 | 9                      | 2.4724             | 3       |
| 2.437                    | 11n HT40 | 8.54                      | 8±1                 | 9                      | 2.4800             | 3       |
| 2.452                    | 11n HT40 | 8.96                      | 8±1                 | 9                      | 2.4877             | 3       |

**Conclusion:**

For the max result  $2.9287 \leq 3.0$  for 1-g SAR extremity SAR, No SAR is required.

Sincerely,



Signature

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