

# Appendix 5

## RF Exposure Information

FCC ID: YFA20061677  
IC ID: 12260A-20061677

## Maximum transmitter power:

### Speed Controller

Frequency (MHz)	Maximum peak field strength (dB $\mu$ V/m)	Maximum transmitter power (mW)
2410	97.1	0.9382
2440	97.5	1.0287
2472	97.0	0.9168

Note: The maximum peak field strength was taken from table of "Subclause 15.249(a)/RSS-210 B.10(a) – Field Strength of Fundamental and Harmonics".

### For FCC

According to KDB 447498 D01:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances*  $\leq 5$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$   
 $\leq 3.0$  for 1-g SAR and  $\leq 7.5$  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
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

### Result:

#### Speed Controller

$$(0.9382/5) \cdot \sqrt{2.410} = 0.291 < 3.0$$

$$(1.0287/5) \cdot \sqrt{2.440} = 0.321 < 3.0$$

$$(0.9168/5) \cdot \sqrt{2.472} = 0.288 < 3.0$$

### Conclusion:

No SAR is required.

### For ISED

#### Speed Controller

According to table 1 in RSS-102 Issue 6, below exemption limit is applied

Frequency: 2440 MHz

At separation distance of  $\leq 5$ mm

Exemption limits: 3mW

### Results:

max. power of channel = 1.0287 mW < 3mW

### Conclusion:

The maximum peak output power of the transmitter is less than the SAR evaluation exemption threshold and hence it complies with the RSS-102 RF exposure requirement