

FCC ID: M7N-BW8170/ IC: 7311A-BW8170**Model number: BW8170US, BW8171****Maximum transmitter power:**

Frequency (MHz)	Maximum field strength at 3m (dBuV/m)	Maximum ERP (dBm)	Maximum output power (mW)
908.4	92.5	-4.9	2.57

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* ≤50 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 ≤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:

$$(2.57/5) \cdot \sqrt{0.9084} = 0.49 < 3.0$$

Conclusion:

No SAR is required.

For IC

According to table 1 in RSS-102 Issue 5, below exemption limit is applied:

- Frequency: 835MHz
- At separation distance of ≤ 5mm
- Exemption limits: 17mW

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 without SAR evaluation.