

RF Exposure Analysis – SAR Test Exemption – BF-IDM30

FCC ID: 2AGZY-BFIDM30

The BF-IDM30 HF read/write head operates using a 13.56 MHz transmitter.

The following FCC Rule Parts and Procedures are applicable:

KDB447498 D04 V01 – Interim General RF Exposure Guidance

Part 1.1307(b)(3)(i)(A) - Blanket RF exposure exemption (i)

Part 1.1307(b)(3)(i)(C) - MPE test exemption (ii)

Part 1.1307(b)(3)(i)(B) - SAR test exemption (iii)

For the BF-IDM30

Operating Frequency: 13.56 MHz

Tx Power_{max}: 81.1 dBμV/m @3m = -14.1 dBm EIRP = -16.25 dBm ERP

Measured radiated power – Ref KDB447498 D04 Section 3.1.2 –

When an antenna port is not available on the device to support conducted power measurement, e.g.: with built-in integral antennas, the available maximum output power or ERP, whichever is larger, and tolerance allowed for production units shall be used to determine RF exposure test exemption and compliance.

Evaluation

From Part 1.1307, RF exposure exemption applies if the maximum transmitted power is less than the maximum of the following three criteria:

- i) Less than 1 mw Blanket exemption. $P_{TH} = 0.001 \text{ W}$ – §1.1307(b)(3)(i)(A)
- ii) determination of exemption under the MPE-based §1.1307(b)(3)(i)(C), if i) not met
- iii) determination of exemption under the SAR-based §1.1307(b)(3)(i)(B) if both i) and ii) are not met

Conclusion

The BF-IDM30's source-based, time-averaged power is -16.25 dBm.

i.e.: less than 1 mW (0 dBm), so complies with the RF exposure blanket exemption in accordance with §1.1307(b)(3)(i)(A).