MDE_PARRO_1426

To Whom It May Concern:

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Maximum Permissible Exposure - according to FCC/IC -

Full connectivity module – FCC ID: RKXFC7100 – IC: 5119A-FC7100

Dear Sirs,

please find our Maximum Permissible Exposure calculations for the full connectivity module FC7100.

Best Regards

Imad Hjije

Maximum Permissible Exposure

Frequency range (MHz)	*Power density (mW/cm²)*
400 – 1500	f/2000
1500 - 100000	1 mW/cm²

MPE Prediction

Maximum peak output power at antenna input terminal at 2.4 GHz band: 23.1 dBm (204 mW)
Maximum peak output power at antenna input terminal at 5 GHz band: 16.5 dBm (44.6 mW)

Prediction distance **R**: 20 cm
Prediction frequencies: 2437 MHz & 5180 MHz

MPE limit **S**: 1 mW/cm²

Equation $\mathbf{S = P*G / (4\pi R^2)}$

S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the centre of radiation of the antenna

Maximum permissible antenna gain at 2.4 GHz: **2.2 dBi**
Maximum permissible antenna gain at 5 GHz: **2.5 dBi**

power density reached value at 2.4 GHz: **0.0674 mW/cm²**

power density reached value at 5 GHz: **0.0158 mW/cm²**