

RF exposure requirements - FCC ID: YM6-AWGH321

Dear Application Examiner,

The maximum measured peak conducted power output is 148 mW (21,7 dBm),
the maximum peak antenna gain is +1 dBi = numeric gain 1,26 (see also FCC test report).

The maximum permissible exposure is defined in 47 CFR 1.1310 with 1 mW/cm².

The RF Module may only be integrated into host devices categorized as "fixed" or "mobile" device where a separation distance of at least 20 cm between the device and it's antenna(s) and any nearby persons can be assured under normal operating conditions.

The maximum permitted level is calculated using the general equation:

$$S = P \cdot G / 4\pi R^2$$

P = 148 mW,

G = 1,26 (numeric gain; +1 dBi = linear power gain relative to the isotropic radiator),

R = 20 cm

$\pi = 3,1416$

Solving for S, the power density at 20 cm is 0,037 mW/cm².

For simultaneous transmission with the already certified BT Module;
[With a max radiated output power of 1.56 mW (EIRP/Original Test Report)
the power density is 0.0003 mW/cm²]

Total power density: 0.037 mW/cm² + 0.0003 mW/cm² = 0.03703 mW/cm²

So the 1 mW/cm² limit is kept under all circumstances.

Please contact us if you have any additional questions.

Best Regards

