



FCC
Federal Communications Commission

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request for a modular approval - FCC ID: RKXFC6100

Dear Application Examiner,

the module "Parrot FC6100" is seeking FCC authorization as a modular transmitter. The requirement of the FCC part 15.212 are met.

The following requirements are fulfilled:

1. The modular transmitter must have its own RF shielding

The radio portion of the module has its own RF shielding. Please see external photos.

2. The modular transmitter must have buffered modulation/data inputs

The module has a memory management unit inside of the IC. It buffers the data inputs.

3. The modular transmitter must have its own power supply regulation

The module is supplied with a unique 3V3 voltage, and integrates its own internal supplies regulations. This is ensured by the IC U1202 on the schematic.

4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204c

The transmitter has been tested with its PCB dedicated antenna, and with an external PCB reference antenna. Please see antenna information sheet. The EUT complies with the antenna requirements of Section 15.203 and 15.204c. The EUT is equipped with a unique antenna connector (UFL).

5. The modular transmitter must be tested in a stand-alone configuration

The EUT was tested in a stand-alone configuration placed on a carrier-test board with dedicated PCB antenna and external reference antenna. Please, see photo report.

6. The modular transmitter must be labelled with its own FCC ID number

The Module is labelled with its own FCC ID. Please see label document.

7. The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements.

The EUT is compliant with all applicable FCC rules. The EUT is only allowed to be connected to batteries. Direct or indirect connection to AC mains is not allowed.

8. The modular transmitter must comply with any applicable RF exposure requirements.

The device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. The calculation for the EIRP value and MPE are as follow:

Bluetooth application:

Maximum peak conducted output power: 2,88 dBm

Antenna gain: 2,18 dBi

EIRP (calculated): 5,06 dBm / 3,21 mW

WLAN / WiFi application(MPE calculation):

Maximum Permissible Exposure

<i>Frequency range (MHz)</i>	<i>Power density (mW/cm²)</i>
400 - 1500	f/2000
1500 - 100000	1 mW/cm ²

Calculations 2.4 GHz band

Maximum peak output power at antenna input terminal: 16.06 dBm

Prediction distance **R**: 20 cm
Prediction frequency: 2412 MHz

MPE limit **S**: 1 mW/cm²

Equation **S = P*G / (4πR²)**

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: **2.18 dBi**

power density reached value: **0.0133 mW/cm²**

Prediction

The maximum allowed MPE value of 1 mW/cm² will not be reached in a distance of 20 cm in case that an antenna with an antenna gain of 2.18 dBi would be used. This means that the power density levels in a distance of 20 cm are in accordance with the FCC regulations as long as the used antenna has a gain below 2.18 dBi.

Please contact us if you have any additional questions.

Best Regards,



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