

## Modular Approval Request Letter

**FCC ID: 2AAL3-RAK310**

**Data: May. 18, 2014**

Gentlemen:

There's an wifi module that would like to have your authorization as a modular approval.

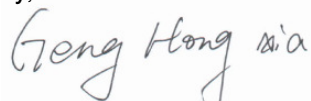
The specific product as below, wifi module, with its designed features and specified description, meets special requirements for full modular approval on FCC Public Notice KBA996369 D01 Released: June 26, 2000 by cross-reference list below.

Company	: ECOVACS Robotics Co., Ltd.
Model Name	: wifi module
Model Number	: RAK310
FCC ID	: 2AAL3-RAK310

Requirement of Public Notice KBA996369 D01 / Part 15.212	Reference to RAK310
1. The modular transmitter must have its own RF shielding.	The module has its own RF shielding. Please see external photo.pdf The RF circuit has been covered with the WIFI module shielding which was connector to GND.
2. The modular transmitter must have buffered modulation/data inputs.	The modular has buffered data inputs. It is integrated in chip AR6302. Please see schematic.pdf The data buffer is supported by the AR6302 internal RF modulation technology.
3. The modular transmitter must have its own power supply regulation.	All power lines derived from the host device are regulated before energizing other circuits internal to the RAK310. Please see schematic.pdf The module has an external regulation SGM2019-1.8 converts 3.3V to 1.8V. And an internal linear regulator converts 1.8V to 1.2V.
4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c).	The RAK310 meets the FCC antenna requirements. It has a unique connector. Please see external photo.pdf The external antenna was connected to the WIFI module with the u.FL coaxial cable.
5. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing.	The RAK310 was tested in a stand-alone configuration. Please see test setup.pdf
6. The modular transmitter must be labeled with its own FCC ID number, and, if the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module.	The label position of RAK310 is clearly indicated. Please see the label.pdf The FCC ID number will be shown on the label outside the host.
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. A copy of these instructions must be included in the application for equipment authorization.	The RAK310 is compliant with all applicable FCC rules. Detail instructions are given in the Users Manual. Please see Installation guide.pdf
8. The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance in accordance with Section 15.247(b)(4).	The RAK310 comply with applicable RF exposure requirements. Please see Maximum Permissible Exposure.pdf

Thank you.

Sincerely,



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