



GE Home & Business Solutions Appliances

Rob Bultman
Principal – Software Architecture

Appliance Park
Louisville KY, 40225
USA

T 502 452 5806
F 502 452 0371
Rob.Bultman@ge.com

RE FCC ID: ZKJ-RANGA001

To the certification reviewer:

We are hereby applying for **full** modular approval of the above-referenced FCC ID, based on compliance with **all** of the criteria as detailed below.

Sincerely,

Rob Bultman
Signature: *Rob Bultman*
Name: ROB BULTMAN
Title: PRINCIPAL ENGINEER

Part 15 Unlicensed Single Modular Transmitter Approval Justification per 15.212

Requirement per 15.212	reference
(i) The radio elements of the modular transmitter must have their own RF shielding.	Shielding is provided by an integrated metal cover over the main micro, transceiver, and PA circuitry.
(ii) The modular transmitter must have buffered modulation/data inputs (if such inputs are provided).	All modulation and data inputs are buffered by circuitry on the transmitter chip.
(iii) The modular transmitter must have its own power supply regulation.	Power supply regulation is provided by circuitry on the module and is regulated to 3.3Vdc +/- 5% for wifi and 3.3Vdc +/- 33mV for BLE.
(iv) The modular transmitter must comply with the antenna and transmission system requirements of §§ 15.203, 15.204(b) and 15.204(c).	The antenna is permanently attached.
(v) The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing for compliance with Part 15 parameters.	Testing was performed with the module outside of the host as shown in the test setup photos.
(vi) The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number. 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.	A sample of the host label is provided as an exhibit, showing the FCC identifier of the module. The ID number will also be printed on the module's PCB silkscreen.

<p>(vii) The modular transmitter must comply with any specific rules or operating requirements that ordinarily apply to a complete 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.</p>	<p>The module complies fully with the operating requirements of Part 15 section [...] as demonstrated in the test report exhibit.</p>
<p>(viii) The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.</p>	<p>This module operates under Part 15 section [...], which is exempt from RF exposure evaluation owing to the very low operating power:</p>