

Federal Communications Commission

Authorization and Evaluation Division

Re: FCC ID: YJ4CMGYZCDCZ31

November 28, 2011

The purpose of this letter is to request (limited) modular approval of the Consert, Inc.'s Zigbee Module, which operates as a transceiver in the Frequency Band of 2.4 to 2.4835 GHz ISM band under the provisions of FCC Part 15.247. The Consert's Zigbee Module is designed to be integrated with Consert's Device Controller (6-layer PCB) for load management purposes.

To address the specific numbered items of Public Notice DA 00-1407:

1. The Consert's Zigbee Module incorporates a single shield over the wireless transceiver IC and RF Front End circuitry. The shield frame is soldered to the printed-circuit board. The bottom of the shield is enclosed by a copper plane that is part of the printed-circuit board.
2. The Consert's Zigbee Module incorporates digital buffers on the data inputs, which are part of the transceiver IC. The peak modulation is set by the firmware that is stored within the transceiver IC. The data rate is set by the same stored firmware. For this reason, over-driving the modulation input, or applying excessive data rates to the data input cannot produce over-modulation.
3. The Consert's Zigbee Module is powered by 3.3VDC power source from its host device (Device Controller) and has its own power supply regulation to generate 1.8VDC and 1.2VDC.
4. Antennas. The Consert's Zigbee Module has an integrated antenna that is inaccessible from the outside. The host device is locked with a security locked that can't be opened once sealed.
5. The Consert's Zigbee Module, when used with a host device (Device Controller) is intended to be installed in a residential configuration. The module has been tested in representative configurations.
6. The Consert's Zigbee Module has its own FCC ID which is printed on the label on the front cover of the host device.
7. The Consert's Zigbee Module complies and is certified for compliance with all of the applicable provisions of FCC Part 15.247 for systems using digital modulation.
8. The Consert's Zigbee Module is a low-power (< 1 W) device and operates with a low duty cycle.
9. The Consert's Zigbee Module has been demonstrated and certified to comply with the MPE RF exposure requirements for mobile devices. Installation and operating instructions specify the required minimum distance from humans for installed gas meters.

Respectfully,

Consert Inc.
4700 Falls of Neuse Rd., Suite 340
Raleigh, North Carolina 27609
www.consert.com

P: 919-855-1060
F: 919-713-0058



A handwritten signature in dark ink, consisting of a series of loops and a long horizontal stroke.

Thi Phan
Hardware Engineer
Consert Inc.
4700 Falls of Neuse Rd, Suite 340
Raleigh, NC 27609
(919) 855-1060 ext. 2069 (office)