## SYNAPSENSE



5/4/2010

Federal Communications Commission 7435 Oakland Mills Road Columbia, MD 21046

To Whom It May Concern:

This letter is to request Limited Modular Approval in accordance with FCC Rule Part 15.212 for the product certified under FCC ID: U62-SRA100. This product is an 802.15.4 compliant radio module and can be used in SynapSense wireless sensor modules. I hereby declare that the following conditions have been met.

- a. The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.
- b. The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with part 15 requirements under conditions of excessive data rates or over-modulation.
- c. The modular transmitter must have its own power supply regulation.
- d. The modular transmitter must comply with the antenna and transmission system requirements of §§15.203, 15.204(b) and 15.204(c). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable). The "professional installation" provision of §15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section.
- e. 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 requirements. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in §15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see §15.27(a)). The length of these lines shall be the length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified and commercially available (see §15.31(i)).
- f. The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number.
- g. 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.
- h. The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.

This product is for the exclusive use of SynapSense and is not for resale. This product will be integrated by SynapSense into host configurations as identified below:

- 1. SynapSense Wireless Sensor Network Node Products
- 2. SynapSense Wireless Power Monitor Products
- 3. SynapSense Wireless Gateways

I acknowledge on behalf of the applicant that compliance of a module in all final configurations is the responsibility of the applicant under the condition that the integrator follows all required installation instructions.

Sincerely,

Pat Weston

**VP** Engineering

SynapSense Corporation