

October 5, 2015

The purpose of this letter is to request Modular approval of the OMNI-ID radio module, Model RM433V2, printed circuit board assembly, which operates as an active RFID gateway in the 433 MHz band under the provisions of FCC Part 15.231. The RM433V2 is designed to be used with Omni-ID active RFID tag products.

To address the specific numbered items of CFR 47 Part 15.212:

- i. The RM433V2 board does incorporate a shield over the wireless transceiver IC and RF Front End module.
- ii. The RM433V2 transmitter 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.
- iii. The RM433V2 has its own power supply regulation, in the form of a linear voltage regulator. It receives unregulated power from an external source, +5VDC and regulates it down to +3.3VDC required by the RF IC.
- iv. Antennas. The RM433V2 has an integrated unique connector which is not available to the general public.
- v. The RM433V2 module is intended to be installed in additional RFID gateways manufactured and supplied by OMNI-ID only. The module has been tested in representative configurations.
- vi. The RM433V2 has a label to identify the module's FCC ID and model number. This label is silkscreen printed on the OMNI-V4 printed circuit board assembly and is thus permanent. Additionally, the FCC ID appears on the outside devices that contain the RM433V2 module.
- vii. The RM433V2 complies and is certified for compliance with all of the applicable provisions of FCC Part 15.231 for RFID devices.
- viii. RM433V2 is a low-power <7mW device and operates with a low duty cycle. The RM433V2 has been demonstrated and certified to comply with the MPE RF (or SAR) exposure requirements for mobile devices. Installation and operating instructions specify the required minimum distance from humans for installed devices.

Sincerely,



Ed Nabrotzky
Executive Vice President Product Development
Ed.nabrotzky@omni-id.com