



Wireless Technology to Control and Monitor Anything from Anywhere™

March 25, 2013

Federal Communications Commission
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Re: FCC ID: U9O-SM240

Gentlemen:

Synapse Wireless Inc. respectfully requests Part 15 unlicensed modular transmitter approval of the Synapse Wireless Inc. SM240 product. In accordance with the Part 15.212(a)(1), here is the response to the items listed for the SM240 product.

Item 1: The SM240 module has a metal RF shield that is soldered to the ground plane on all side, enclosing all electronics, and prevents coupling of the RF circuitry with the host board electronics in which the SM240 is plugged into in order to comply with this item.

Item 2: All input data to the SM240 is buffered in the microcontroller located on the SM240. Firmware in the microcontroller then controls the flow of this data to the transmitter for RF communications to prevent excessive data rates or over-modulations to comply with this item.

Item 3: The SM240 transmitter is the Atmel ATMEGA128RFA1 series of IEEE 802.15.4 transceiver modems. This modem has internal power supply regulation to comply with Item 3.

Item 4: The connection to an antenna is made through a host's printed board micro-strip trace to a trace antenna. Specifications for the antenna and trace design are provided through the SM240 data sheet.

Item 5: The necessary SM240 and support hardware was provided to the certification lab to show compliance with this item.

Item 6: The FCC ID label assigned to the SM240 will be located on the top outside face of the SM240. In the case that this label on the SM240 is not visible after installation, the 430154-01A Data Sheet will document to the user of the SM240 that the FCC ID labeling requirements must be included on an exterior label of the finished product enclosure using the SM240 stating that the product contains the FCC ID label for the SM240. A copy of 430154-01A Data Sheet will be provided to the FCC to show this compliance.

Item 7: In order to show compliance to this item, a copy of the 430154-01A Data Sheet will be provided to the FCC to show that the issues of Item 7 have been properly documented.

Item 8: The SM240 will be tested to comply with any applicable RF exposure requirements. Also, in order to show compliance to aspects of this item, a copy of the 430154-01A Data Sheet will be provided to the FCC to show that the issues of Item 8 have been properly documented.

Sincerely,

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