



Date: 8/5/2019

To: Federal Communications Commission

Dear Sir/Madam:

This letter outlines changes introduced by 3SI Security Systems to already certified module identified as:

FCC ID: Q6KAT170503A  
IC: 5043A -AT170503US

1. 216.475 MHz beacon transmit antenna optimization. Evaluation of the integrated product revealed that the flexible tab originally reserved as the ground plane extension was practically neutral to the modem antenna radiated performance. 3SI placed a trace antenna on this tab that exhibits increased radiation efficiency, as compared to the originally filed discrete component antenna. 3SI reduced the conducted power to this antenna to remain within limits of the originally filed ERP data, thus reducing the transmitter current consumption and extending the useful battery life. The ERP and spurious emissions were evaluated by SGS Laboratory in Suwannee, GA and found compliant.
2. A new host PCB was added as an option for the module to expand the functionality. The new PCB contains a battery charging circuitry, relays to control external sensors or alarms, and the I<sup>2</sup>C controller to communicate with the module. Radiated and conducted emissions were verified by SGS Laboratory in Suwannee, GA and found compliant.
3. Since the new host described above introduced a ground plane near the 2.4 GHz antenna, WiFi and Bluetooth radiated performance was evaluated by SGS Laboratory in Suwannee, GA and found compliant.

3SI Security is seeking approval of the above changes. Supporting EMC Reports are enclosed.

Sincerely,

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