

October 5, 2016

Federal Communications Commission

Authorization and Evaluation Division 1435 Oakland Mills Road

Subject: Monnit Corporation declaration for compliance with FCC PART 15

UNLICENSED MODULAR TRANSMITTER APPROVAL of Sec 15.212

& Pubic Notice # DA 00-1407

FCC ID: ZTL-G2XL1

Dear Si/Madam:

Monnit Corporation hereby confirms that the following requirements per FCC PART 15 Unlicensed Modular Transmitter Approval of Sec 15.212 & Pubic Notice # DA 00-1407 are met for Modular Approval certification. The module denoted as ZTL-G2SC1 is an FHSS IOT digital wireless platform for telemetry and other data transmission. This letter addresses the information required by points one through eight of 47 CFR 12.2.212.

1. "The modular transmitter must have its own RF shielding."

YES – The G2XL1 module is utilizing industry standard RF shielding consisting of a metal shield can seam-welded to a 4-layer PCB. The PCB is an integral part of the shield, being designed with solid ground planes under and surrounding the transmitter. Any integrator is instructed to not tamper with the shield.

2. "The modular transmitter must have buffered modulation/data inputs."

YES – The G2XL1 module has buffered data inputs that pass through an embedded processor responsible to manage Modulation and data rates. It is not possible to present the module with data in a fashion that will cause the module to over-modulate or become excessive.

3. "The modular transmitter must have its own power supply regulation."

YES – The G2XL1 module can be powered by a 2.4 – 3.9 VDC source (battery, or external line). The main SoC IC (CC1310) contains a total of 4 regulators for different SoC subsystems. Two of these regulators are dedicated to the rail supplying the radio. The radio is always limited to this range internally and cannot be affected by external voltage fluctuations in the stated input range. Additionally, the Skyworks Front End Module (FEM) SE2435L is directly regulated from the TPS61252 boost regulator. This ensures the FEM has a stable voltage across the stated input range.



4. "The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c)."

YES – The User's manual contains a detailed list of certified antenna and their proper configurations.

5. "The modular transmitter must be tested in a stand-alone configuration."

YES – The G2XL1 module was tested in a stand-alone configuration and found to be in compliance.

6. "The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying the FCC identification number."

The FCC ID and model number is labeled on every modular device. FCC ID label and location exhibit has been included which shows the exact location of the label. Since the FCC ID number will not be visible when the module is installed inside the host device, another label with the same FCC ID is applied to the exterior of the final enclosure. Some examples of these additional labels have also been included in this submission.

7. "The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements."

The G2XL1 complies with all specific rules such as modulation scheme, modulation type, bandwidth, antenna requirements, power supply regulation, suppression of spurious emissions, and so on. A detailed user manual is provided with every G2XL1 which instructs the user to maintain compliance as per the requirements of the Commission. The manual also cautions the user not to make any changes or modifications not approved by the party responsible for compliance. Please see the operating description exhibit for further details to understand how the G2XL1 complies with specific rules and operating requirements as per FCC.

8. "The modular transmitter must comply with any applicable RF exposure requirements in its final configuration."

The G2XL1 is compliant with all applicable RF exposure requirements and is operated in a manner that ensures the public is not exposed to radio frequency in excess of Federal Communication Commission's guidelines. Please see the RF exposure exhibit.



Dated: 10/05/16

By

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