

02 February 2022

To: SGS North America Inc.

620 Old Peachtree Road

SUITE 100

Suwanee, Georgia **United States**

Dear Sir/Madam,

Re: Request for FCC module certification FCC ID: R7PEC6R1X1

We hereby request a ⊠Full / □Limited Modular certification for the FCC ID referenced above.

| Requirement (47CFR15.212 / KDB996369) | | Comply (Y/N) – Explanation | | |
|---------------------------------------|---|---|--|--|
| 1. | The radio elements must have the radio frequency circuitry shielded. Physical components and tuning capacitor(s) may be located external to the shield, but must be on the module assembly | Y – The M225 module is self-shielding and is not dependent on any component or characteristic of the device into which it is embedded. Shielding is accomplished through a combination of metallic self-shielding components, copper planes, guards, and vias in the PCB. The result is a design that has been proven to be neither sensitive to outside influence nor capable of introducing interference into outside components. | | |
| 2. | The module must have buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal | Y – The M225 module does not have external modulation or data inputs. Rather, the RF sections are driven by an on-board microprocessor which directly controls the RF data lines and operates so as to not allow excessive modulation. | | |
| 3. | The module must contain power supply regulation on the module | Y - The M225 module uses a buck/boost DC/DC converter to provide all the electronics with a supply that is fixed, even when the input voltage is varied | | |
| 4. | The module must contain a permanently attached antenna, or contain a unique antenna connector, and be marketed and operated only with specific antenna(s), per §§ 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b) | Y - The M225 module utilizes a permanently attached OdBi Inverted-F antenna. | | |
| 5. | The module must demonstrate compliance in a stand-alone configuration | Y - All testing on the M225 module was conducted standalone. No shields or enclosures were used, other than those fully integrated into the modules themselves | | |
| 6. | The module must be labeled with its permanently affixed FCC ID label, or use an electronic display (see KDB Publication 784748); | Y – The FCC identifier is silk-screened onto the PCB | | |
| 7. | The module must comply with all specific rules applicable to the transmitter, including all the conditions provided in the integration instructions by the grantee | Y - The M225 module complies with all pertinent rules for its section. | | |

| 8. | The module must comply with RF exposure | Y - The M225 module complies with all exposure | |
|----|---|---|--|
| | requirements | requirements. As a component used in the Utility | |
| | | industry, this product is not intended for use near | |
| | | human operators. | |

Sincerely,

Jeremy Pickens, RF Lab Manager (Agent for Landis+Gyr)

SGS North America, Inc. 620 Old Peachtree Rd., NW

Suite 100

Suwanee, GA 30024

FCC Modular definitions, From FCC KDB 996369 D01 Module Equip Auth Guide v01r04

- A. Single-modular transmitter is a self-contained, physically delineated, component for which compliance can be demonstrated independent of the host operating conditions, and which complies with all eight requirements of Section 15.212(a)(1) as summarized below. See Section 15.212 for more detailed information, and Section 2.901 (and subsections that follow) for general certification requirements.
- **B. Limited single-modular transmitter** is a transmitter that does not meet all eight requirements listed in Section 15.212(a) (1), and compliance can be demonstrated only for specific host and applicable operating conditions in which the transmitter will be used. For example, manufacturers have flexibility with respect to requirements such as module shielding, buffered modulation/data inputs and power supply regulation. If one or more of these functions (shielding, buffered modulation/data inputs and power supply regulation) are provided by a specific host or hosts, then the module can be granted as a limited module that is limited to that specific host or hosts. The responsible party must demonstrate how it will retain control over the final installation of the device, such that compliance of the product is ensured by limiting the installation to a specific host or hosts, for example.