

To: File

From: Richard Timko

Subject: Gridstream RF Enhanced A3 (R7PEC6R1S2) Modular Approval Request

March 14, 2013

1 Scope

FCC Public Notice **DA 00-1407** released June 26, 2000 communicated guidance for products requesting modular approval. In particular, eight requirements were enumerated along with a request that each of the eight be explained for any product requesting such approval.

It is the purpose of this document to respond to that guidance in regard to Landis+Gyr product: **Gridstream RF Enhanced A3**.

2 Modular Approval Requirements

2.1 RF Shielding

The **Gridstream RF Enhanced A3** 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.

2.2 Buffered Modulation / Data Inputs

The **Gridstream RF Enhanced A3** module does not have external modulation or data inputs. Rather, the RF section is driven by an on-board microprocessor which directly controls the RF data lines and operates so as to not allow excessive modulation.

2.3 Power Supply Regulation

The **Gridstream RF Enhanced A3** module uses linear, low-dropout regulators to provide all the electronics with a supply that is fixed, even when the input voltage is varied.

2.4 Antenna Requirement

The **Gridstream RF Enhanced A3** module utilizes an external planar inverted-F antenna that is connected to the PWB with a female MCX coaxial connector.

2.5 Stand-Alone Testing

All testing on the **Gridstream RF Enhanced A3** module was conducted standalone. No shields or enclosures were used, other than those fully integrated into the module itself. No ferrites were used on data or power lines during testing. This device is DC powered, and exceeds applicable conducted emissions requirements.

2.6 Labeling

As indicated, each module will have its own FCC ID label. In addition, devices into which they are placed will have labels indicating that this module is contained within. Exact text will be as specified in the FCC Public Notice.

2.7 Specific Rules and Operating Requirements

The **Gridstream RF Enhanced A3** module complies with all pertinent rules for its section. Other than its reduced power level, it shares common code and is functionally equivalent to the 26-1055 product which is FCC certified as R7PIWRS3.

2.8 RF Exposure Requirements

The **Gridstream RF Enhanced A3** module complies with all exposure requirements. As components used in the Utility industry, this product is not intended for use near human operators.