

To: File
From: Richard Timko
Subject: **GPR (R7PEC6R1S1) Modular Approval Request**

March 3, 2014

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: **GPR**.

2 Modular Approval Requirements

2.1 RF Shielding

The **GPR** 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 **GPR** 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 **GPR** 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 **GPR** module utilizes an inverted-F-type antenna which is integrated into the PWB and is not changeable.

2.5 Stand-Alone Testing

All testing on the **GPR** 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 battery-powered, therefore AC power line conducted emissions is not applicable.

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 **GPR** module complies with all pertinent rules for its section. Landis+Gyr provides adequate instructions along with the module to explain how to comply with any specific rules or operating requirements. A copy of these instructions is included in the application for equipment authorization.

2.8 RF Exposure Requirements

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