

**To:** File  
**From:** Richard Timko  
**Subject:** Landis+Gyr Elster Multi-Function Meter Module (R7PEC1R1S1)  
Modular Approval Request

January 3, 2013

## 1. Scope

FCC Public Notice **DA 00-1407** released June 26, 2000 communicated guidelines for products requesting modular approval. In particular, 8 requirements were enumerated along with a request that each of the 8 be explained for any product requesting such approval. It is the purpose of this document to respond to those 8 guidelines in regard to the Landis+Gyr products: Elster Multi-Function Meter Module.

## 2. Modular Approval Requirements

### 2.1 RF Shielding

The Landis+Gyr Elster Multi-Function Meter 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 Landis+Gyr Elster Multi-Function Meter 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.

### 2.3 Power Supply Regulation

The Landis+Gyr Elster Multi-Function Meter 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 Landis+Gyr Elster Multi-Function Meter Module utilizes an external antenna which is connected by a unique Coax, Plug, Crimp, Right Angle, RG316 connector.

### 2.5 Stand-Alone Testing

All testing on the Landis+Gyr Elster Multi-Function Meter Module was conducted standalone. No shields or enclosures were used, other than those fully integrated into the modules themselves. No ferrites were used on data or power lines during testing. These devices are DC powered, and exceed applicable conducted emission 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 Landis+Gyr Elster Multi-Function Meter Module complies with all pertinent rules for its section.

### 2.8 RF Exposure Requirements

The Landis+Gyr Elster Multi-Function Meter Module complies with all exposure requirements.

Sincerely,



Name: Richard Timko  
Title: Quality Engineer