

To: File

From: Timothy R. Walters

Subject: Commercial Gas Meter Module, Generation 2 (Model: 25-1079)

Limited Modular Approval Request

January 26, 2009

1 Scope

FCC Public Notice DA 00-1407 released June 26, 2000 communicated guidelines for products requesting Limited Modular Approval (LMA). In particular, 8 requirements for Modular Approval 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 the modular approval guidelines in regard to the Cellnet Technology, Inc. product: Commercial Gas Meter Module, Generation 2 (Model: 25-1079). It is also the purpose of this document to demonstrate how the Grantee, Cellnet Technology, Inc., can demonstrate that it will retain control over the final installation of the device such that compliance of the end product is assured.

2 Compliance to Modular Approval Requirements

2.1 Buffered Modulation / Data Inputs

The Commercial Gas Meter Module, Generation 2 (Model: 25-1079) 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.

2.2 Power Supply Regulation

The Commercial Gas Meter Module, Generation 2 (Model: 25-1079) uses a switching buck regulator to provide all the electronics with a supply that is fixed, even when the input voltage is varied.

2.3 Antenna Requirement

The Commercial Gas Meter Module, Generation 2 (Model: 25-1079) includes an integrated antenna. The antenna is a loop-type partially integrated into the PCB used in conjunction with another U-shaped metal structure permanently soldered on to the PCB and is not changeable.

2.4 Stand-Alone Testing

All testing on the Commercial Gas Meter Module, Generation 2 (Model: 25-1079) was conducted stand-alone. No shields or enclosures were used, other than that fully integrated to the module itself. No ferrites were used on data or power lines during testing. The device is battery (DC) powered.

2.5 Labeling

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

2.6 Specific Rules and Operating Requirements

The Commercial Gas Meter Module, Generation 2 (Model: 25-1079) complies with all the pertinent rules for its section.

2.7 RF Exposure Requirements

The Commercial Gas Meter Module, Generation 2 (Model: 25-1079) complies with all exposure requirements. As a component used in the Utility industry, this product is not intended for use near human operators.

3 Demonstration for Limited Modular Approval

The Grantee, Cellnet Technology, Inc., will retain control of the final installation of the device, the Commercial Gas Meter Module, Generation 2 (Model: 25-1079), upon only specifically approved types of commercial gas meters with the specified installation kit. The location of installation of the device is upon a commercial gas meter via a specified bracket off to the side and top of the main body of the meter. Compliance to Rule Part 15.247 has been demonstrated by testing the device for Radiation Emissions in the orientation which the device will be finally installed and using only the specified installation kit to the type of commercial gas meter which the Commercial Gas Meter Module, Generation 2 (Model: 25-1079) monitors.

Limited Modular Approval is sought for equipment authorization upon these specified hosts. The Grantee, Cellnet Technology, Inc., controls the end product's installation upon these specific hosts through particular installation guidelines by trained personnel supervised by Cellnet Technology, Inc. The module can only be installed in one particular mechanical orientation with specific brackets, screws and fasteners supplied by Cellnet Technology, Inc. as a kit. The Grantee, Cellnet Technology, Inc., is responsible that these devices are maintained properly and remain installed correctly through published installation guidelines. Tampering with the installed device is monitored by the Grantee, Cellnet Technology, Inc., by mechanical and electronic signal means. The installation upon the specified host devices listed above are similar to the conditions and mechanical orientations in which the modules were tested to comply with Radiated Emissions requirements.