



Excellence in Compliance Testing

Certification Exhibit

FCC ID: R7PEG1R1S1

FCC Rule Part: 15.247

ACS Report Number: 09-0075-15C

Manufacturer: Cellnet Technology, Inc.
Model: Gridstream Focus AX Integrated

Manual

Gridstream RF E350 FOCUS AX Data Sheet



General

The Gridstream RF E350 FOCUS AX module is an integrated solution with FOCUS AX advanced metering electronics the Gridstream AMR communication electronics combined together on a single PCB. It uses field-proven Digital Multiplication Measurement Technique to ensure a highly accurate load performance and dependability during the entire life of the product. It also offers a Service Disconnect option and ZigBee connectivity for HAN applications

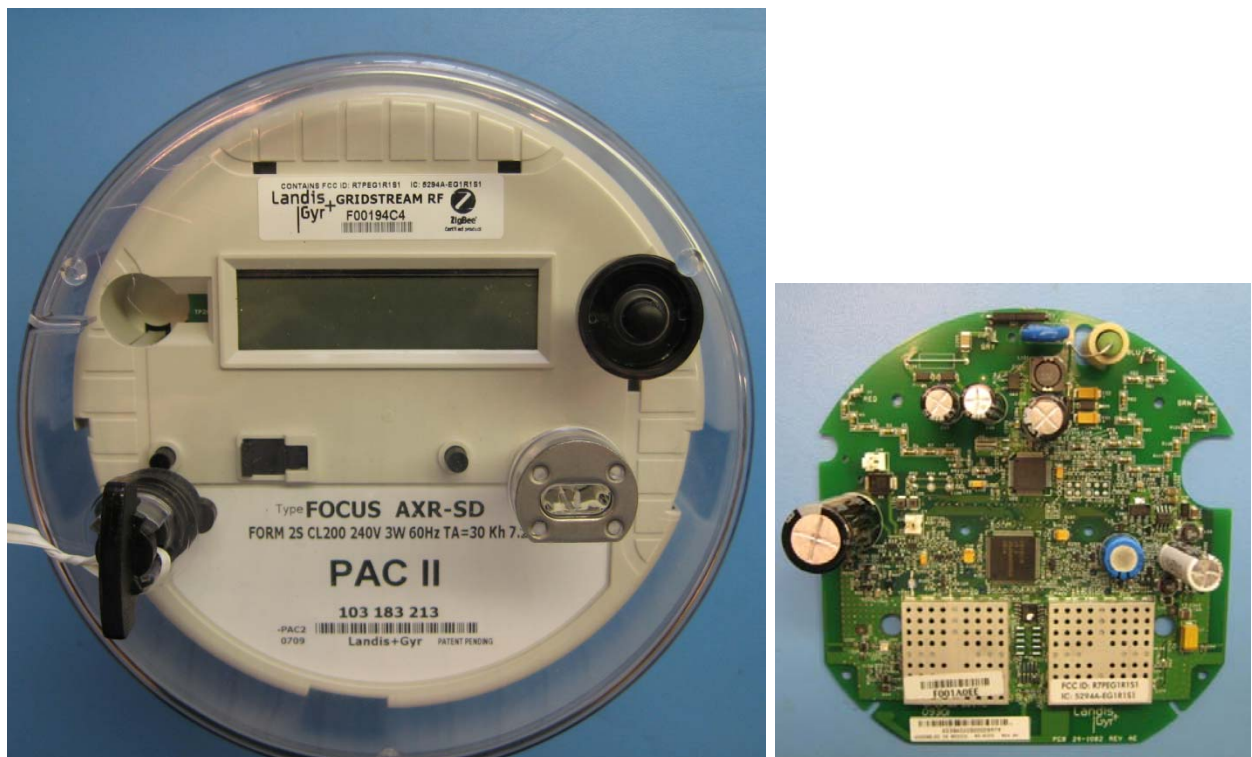


Figure 1: Landis+Gyr FOCUS AX meter and the Gridstream RF E350 FOCUS AX module

FCC Compliance Information

Model: 40-6203 (Forms 2S, 2S SD, 2SE, 3S, 4S), 40-1234 (Forms 1S, 1S SD)

FCC ID: R7PEG1R1S1

IC: 5294A-EG1R1S1

Compliance Statement (Part 15.19)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation

Endpoint Location

To comply with FCC's RF exposure limits for general population/uncontrolled exposure, the antenna(e) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

Endpoint Usage

The Gridstream RF E350 FOCUS AX will be used:

- For residential and commercial metering applications
- At homes and businesses

The Gridstream RF E350 FOCUS AX requires professional installation by qualified personnel.

RF Interference

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful radio frequency energy and, if

not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the meter off, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Consult Landis+Gyr or an experienced radio/TC technician for help



Changes or modifications not expressly approved by Landis+Gyr for compliance could void the user's authority to operate the equipment

Specifications

Table 1: Meter Compatibility

S-Base Meter Forms	Voltage	Units	Comments
1S CL100	120	Vac	Only 1S and 2S are available with Service Disconnect
2S CL200	240	Vac	
2SE CL320	240	Vac	
3S CL20	120	Vac	
3S CL20	240	Vac	
4S CL20	240	Vac	

Table 2: Gridstream Radio General

Parameter	Value			Units	Comments
	Min	Typ	Max		
RF Frequency Range	902.1		927.9	MHz	
RF Baud Rate	9.6		19.2	kbps	Programmable
Output power	25.25	26.25	27.25	dBm	Over temperature range, <2:1 VSWR load
Receive Sensitivity	-112	-111	-108	dBm	At 10% PER , depends on baud rate
Antenna Type	Inverted F				Printed
Antenna Gain	+5			dBi	Peak gain

Table 3: ZigBee Radio General

Parameter	Value			Units	Comments
	Min	Typ	Max		
RF Frequency Range	2.400		2.485	GHz	
RF Baud Rate		250		kbps	
Output power	18	20	21	dBm	<2:1 VSWR load, Approx. +2dBm output power on channel 26 (2.485 GHz)
Receive Sensitivity	-106	-104.5	-102	dBm	At 1% PER
Antenna Type	Inverted F				Printed
Antenna Gain	+5			dBi	Peak gain

Table 4: Standards/Compliance

Standards/compliance	
FCC Title 47 CFR Part 15	Radiated and Conducted Emissions (incl. intentional radiators)
IEC 61000 4-2,3,4,5,6,8,9,11	Electromagnetic Compatibility
ANSI C12.20	National Standard for Electricity Meters - 0.2 and 0.5 Accuracy Classes
ANSI C12.1	Code for Electricity Metering
ANSI C37.90.1 (1989)	Standard Surge Withstand Capability (SWC) Tests

Table 5: Mechanical

Parameter		units
Size	5.5L x 5.0 W x 1.5 H	Inches
weight	48.2	g

Table 6: Environmental

Parameter	Min	Max	Units	Notes
Storage Temperature	-40	85	°C	
Operating Temperature	-40	85	°C	
Relative Humidity	5	85	%	Non-condensing

Contact Information

Technical Support: 1-888-390-5733

Internet: www.landisgyr.com

Fax: 1-218-562-5530

E-mail: solutionsupport.na@landisgyr.com