

# High Speed FOCUS AX Modular Gridstream RF Endpoint Data Sheet



## General

The FOCUS AX Modular Gridstream RF endpoint is designed to accommodate Landis+Gyr FOCUS AX meters for use in residential and light industrial services. The FOCUS AX Advanced Function meter is an Active Energy kWh/kW/TOU Meter. The meter features Digital Multiplication Measurement Technique, meets ANSI standards for performance and utilizes ANSI C12.19 protocol (between meter and AMR device).



*Figure 1 - 1. The FOCUS AX Modular Gridstream RF Endpoint Module and the Landis+Gyr FOCUS AX Meter*

## FCC Compliance Information

**Model: FASY-0864**  
**FCCID: TEB-HUNTSU864**  
**IC: 5931A-HUNTSU864**

## 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.



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

## 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 FOCUS AX Modular Gridstream RF endpoint will be used:

- for residential and commercial metering applications.
- at homes and businesses.

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

## RF Interference

This equipment 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.

## Required Software

To work with the endpoint, you need one of the following software tools:

- Command Center 4.1 or greater.
- RadioShop.
- Network Configuration Manager.
- Landis+Gyr 1132Prog application.
- Endpoint Testing Manager.
- Endpoint Implementation Manager.

# Specifications

**Table 1-1. FOCUS AX Modular Gridstream RF Endpoint Specifications**

Category	Specification	Value or Range			
Compatible Meters	Landis+Gyr FOCUS AX Supported Meter Forms	FOCUS AX		FOCUS AX-SD	
		Form	Class	Form	Class
		1S	100	1S	100
		2S	200	2S	200
		2SE	320	12S	200
		2K	480	25S	200
		3S 120V	10/20		
		3S 240V	10/20		
		4S	10/20		
		12S/25	200		
		12SE/25	320		
		16S	200		
		16SE	320		
		36(6)S	20		
9(8)S	20				
45S	20				
Electrical	Voltage	9-16V (from meter's power supply)			
	Power	Max: 1.0W Typical: 0.6W			
RF 900 MHz	Output Power	+26 dBm +/-1 dBm			
	Adjacent Channel Power	39 dBc Nominal			
	Transmit Frequency	902 to 928 MHz ISM unlicensed (FCC Part 15)			
	Communication Protocol	Grid Stream Protocol for Command Center			
	Receive Sensitivity	-108 dBm Nominal			

**Table 1-1. FOCUS AX Modular Gridstream RF Endpoint Specifications**

Category	Specification	Value or Range
RF ZigBee	Output Power	+20 dBm +/-
	Adjacent Channel Power	40 dBc Nominal
	Transmit Frequency	2405-2480 MHz
	Communication Protocol	ZigBee Protocol
	Receive Sensitivity	-104 dBm Minimum
Standards Compliance	FCC Title 47 CFR Part 15	Radiated and Conducted Emissions (incl. intentional radiators)
	IEC 61000 4-2,3,4,5,11,12	Electromagnetic Compatibility
	ANSI C12.19	Compatible with Utility Industry End Device Tables
	ANSI C12.20	National Standard for Electricity Meters - 0.2 and 0.5 Accuracy Classes
	ANSI C12.21	Code for Electricity Metering
	ANSI C37.90.1 (1989)	Standard Surge Withstand Capability (SWC) Tests
Environmental	General Environmental	Outdoor, rain-protected, sunlight-exposed
	Operating Temperature Range	-40 to +70 C (under meter glass)
	Humidity	0 to 95% relative humidity, non-condensing
Mechanical	Size	3.242 L x 5.315 W x .094 inches, typical
	Weight	2.0 ounces (56.7 g), typical