3G S4e Gridstream Endpoint with ZigBee Data Sheet



General

The 3G S4e Gridstream endpoint is designed to accommodate Landis+Gyr S4e poly-phase meters for use in commercial and light industrial services. The S4e 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). Can be deployed with or without ZigBee.

Display Options

• Energy Metrics: +kWh, -kWh, Net kWh, and added kWh (Security).



Figure 1. The 3G S4e Gridstream Endpoint Module and the Landis+Gyr S4e Meter

FCC Compliance Information

Model: FASY-0825

FCCID: TEB-HUNTSU825 IC: 5931A-HUNTSU825

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 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 3G S4e Gridstream endpoint will be used:

- for commercial and light industrial metering applications.
- at homes and businesses.

The 3G S4e Gridstream 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 ver. 4.1 or greater
- · RadioShop.
- Network Configuration Manager.
- Landis+Gyr 1132Prog application.
- Endpoint Testing Manager.
- Endpoint Implementation Manager.

Specifications

Table 1. 3G S4e Gridstream Endpoint Specifications

Category	Specification	Value or Range				
Compatible Meters	Landis+Gyr S4e Supported Meter Forms	Form	Class	Form	Class	
		3\$	20	16SE	320	
		5S/45S	20	16/15K	480	
		6S/36S	20		-1	
		9S/8S	20			
		2S	200			
		12S	200			
		16S/15S	200			
		25S	200			
		12SE	320			
Electrical	Voltage	10.5-13.5	10.5-13.5V (from the meter's power supply)			
	Power	Max: 2.5W Typical: 0.5W				
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	Gridstream Protocol for Command Center				
	Receive Sensitivity	-108 dBm minimum				
RF ZigBee	Output Power	+20 dBm	+20 dBm +/-1			
	Adjacent Channel Power	40 dBc M	40 dBc Minimum			
	Transmit Frequency	2405-248	2405-2480 MHz			
	Communication Protocol	ZigBee Pro	ZigBee Protocol			
	Receive Sensitivity	-104 dBm	-104 dBm minimum			

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Category	Specification	Value or Range	
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	
	ANSI C12.22	Transport of ANSI C12.19 Over Network Transmissions	
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		
	Weight		

Contact Information					
Technical Support:	Internet:	Fax	E-mail:		
1-888-390-5733	www.landisgyr.com	1-218-562-5530	solutionsupport.na@landisgyr.com		