

Gridstream RF Mesh Commercial & Industrial Endpoints



Meter Platforms
Series 5 S4x
Enhanced Elster A3
Enhanced GE kV2c

Options to Take Control of Advanced C&I Metering Applications

Overview

Robust, secure and future-proof. Landis+Gyr's Gridstream® RF Mesh Commercial & Industrial Endpoints bring electricity usage data to new levels.

The endpoint works with the polyphase meter to take advantage of advanced metrology and data values, while providing remote control of demand resets and TOU periods. The seamless integration delivers a direct read of the meter register to capitalized on advanced functionality.

The endpoint transmits and receives data through Gridstream's robust and self-healing, peer-to-peer mesh network, utilizing the 902 to 928 MHz unlicensed frequency. Endpoints prioritize messages based on application, expand to millions of endpoints and offer

control through the intuitive, browser-based interface for streamline network and data management. Full two-way communication ensures commands are sent to the endpoint to reconfigure settings or upgrade firmware, without disrupting the meter data flow.

In addition to kWh, kW, time-of-use and voltage readings, the RF endpoint reports load profile and up to 5-minute interval data for billing, engineering and customer service applications. Endpoints come standard with ZigBee® transmitter for communication with in-premise devices.

The Series 5 S4x platform accommodates a standards based stack firmware, enabling use of non-proprietary network managers and tools.

FEATURES & BENEFITS:

Why Landis+Gyr makes a difference.

- Multiple options and enhancement capabilities via over-the-air or DCW upgrade
- Full, four quadrant meter ensures revenue optimization
- Enhanced security – optical port lockout feature with Gridstream communications, cover removal switch and magnetic tamper detection
- Reactive, TOU and two separate load profiles are standard on every S4x Meter
- Support for new enhanced metrology features, including 31 new load profile channels and four-quadrant reactive energy
- Full two-way communication – on-demand or routine
- Advanced data support – demand, TOU, voltage
- Voltage monitoring and reporting capabilities

Product Specifications: Gridstream RF Mesh Commercial & Industrial Endpoints

	S4x	Elster A3	GE kV2c
Electrical			
Voltage	10.5-13.5V (From meter's power supply)	13.5VDC + 1V, 50mA (limited duration from	28 VDC (From meter's power supply) meter's power supply)
Power	Max: 1.0W Typical: 0.3W	Max: 3.0VA Typical: < 1VA	Max: 1.0W Typical: 0.3W
RF 900 MHz			
Output Power	+26 dBm +/- 1 dBm	+26 dBm +/- 1 dBm	+26 dBm +/- 1 dBm
Adjacent Channel Power	+39 dBc Nominal	+39 dBc Nominal	+39 dBc Nominal
Transmit Frequency	902 to 928 MHz ISM unlicensed (FCC Part 15)	902 to 928 MHz ISM unlicensed (FCC Part 15)	902 to 928 MHz ISM unlicensed (FCC Part 15)
Receive Sensitivity	-110 dBm (typical, 9.6 kbps);	-110 dBm (typical, 9.6 kbps); -102 dBm (typical, 19.2 kbps)	-108 dBm minimum -102 dBm (typical, 19.2 kbps)
RF ZigBee®			
Output Power		+20 dBm +/- 2 dBm	
Adjacent Channel Power		40 dBc Nominal	
Transmit Frequency		2405-2480 MHz	
Receive Sensitivity		-104 dBm Minimum	
Communications Protocol		ZigBee Protocol	
Standards Compliance			
FCC Title 47 CFR Part 15	Radiated and Conducted Emissions (including intentional radiators)		
IEC 61000 4-2, 3, 4, 5, 11, 12	Electromagnetic Compatibility		
ANSI C12.16	Dielectric (2.5kV, 60 Hz for 1 minute)		
ANSI C12.19	Compatible with Utility Industry End		
ANSI C12.20-2002	National Standard for Electricity Meters - 0.2 and 0.5 accuracy class		
ANSI C12.21	Optical port protocol with 128-bit AES Authentication		
ANSI C12.1-2008	Code of Electricity Metering		
ANSI C37.90.1-2002	Standard Surge Withstand Capability (SWC) Tests		
ANSI 62.41	High Voltage Line Surge (1.2 x 50 Isec)		

COMPATIBILITY

CLASS	VOLTAGE	1S	2S	2SE	3S	4S	5S	12S	9S	12SE	16S	25S	29S	25SE	12K	16K	27K	10A	45A
20	240/120/480				S4x	kV2c			S4x				S4x					S4x	S4x
200	120/480	S4x, kV2c	S4x, kV2c					S4x, kV2c			S4x, kV2c	S4x							
320	120/480		kV2c	S4x, kV2c				kV2c		S4x				S4x					
480	120/480														S4x	S4x	S4x		