

Gridstream® Connect Cellular Commercial & Industrial Meters



LTE-M Cellular S4x

Plug-and-play cellular meters that are omni-carrier capable

Overview

Landis+Gyr's LTE-M cellular communication for the S4x meters provides Gridstream® Connect customers with another AMI option that is feature-rich and simple to deploy. The LTE-M cellular endpoint is preconfigured to self-register with Landis+Gyr's Command Center head-end. With the turnkey option, Landis+Gyr offers a 15-year contract for connectivity services. This includes omni-carrier capability that ensures that if one network fails, the meter will switch to another available carrier and continue transmitting.

FEATURES

- Active and reactive energy and demand (TOU capable), including bi-directional measurement
- Integrates into all forms, classes, and voltages of the S4x meter platforms, including relay boards detection, logging, and reporting of diagnostic information for each meter
- Modem, module, ZigBee, and metrology firmware can be upgraded over the cellular network with no interruption of readings during upgrades
- Two sets of load profile data with configurable intervals (1, 5, 15, 30, and 60 minutes)
- Capable of supporting TOU without a battery
- Advanced Security available

SOFTWARE REQUIREMENTS

Deployment of an LTE-M cellular endpoint requires:

- Command Center version 7.4 or later, licensed with the Cellular Adapter
- 1132 Suite, version 5.13MR1

S4X MODULE OVERVIEW

The endpoint assembly contains:

- S4x meter
- LTE-M cellular communication module
- SIM card – Form 2FF, industrial-rated
- “Under-glass” wideband antenna for cellular radio
- Built-in antenna for ZigBee



BI-DIRECTIONAL
MEASUREMENT



INTEGRATES
WITH S4X METER
PLATFORMS



DETECTION, LOGGING,
AND REPORTING OF
DIAGNOSTIC
INFORMATION



ADVANCED
SECURITY
AVAILABLE

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PRODUCT SPECIFICATIONS

CELLULAR MODULE					
Category:	Cat-M1				
Standards:	3GPP Release 13				
Supported Bands:	2, 4, 12, 13, 25 (Cat-M1)				
Regulatory:	FCC, IC; IEC 61000-4-2, 3, 4, 5, 12, 18; ANSI C.12.20; ANSI C12.1, ANSI C37.90.1 (2002)				
ELECTRICAL					
Supply Voltage	11 - 28Vdc				
Power	5W Peak .8W Continuous				
ENVIRONMENTAL					
Parameter	Min	Max	Units	Notes	
Storage Temperature	-40	85	°C		
Operating Temperature	-40	75	°C		
Relative Humidity	0	95	%	Non-condensing	
ZIGBEE TRANSMIT POWER AND RECEIVE SENSITIVITY					
ZigBee Radio General Parameter	Value			Units	Comments
	Min	Typ	Max		
RF Frequency Range	2.405		2.475	GHz	
No. of Channels	15				
Modulation Type	O-QPSK				Comply with IEEE 802.15.4

ZIGBEE TRANSMIT POWER AND RECEIVE SENSITIVITY					
Data Rate	250			kbps	
IEEE Specification	802.15.4				
On-air Tx Time (Duty Cycle)	66			%	66ms per 100ms max
Memory RAM	12			KB	
Flash	192				
Antenna Type	Inverted F				Printed
Peak Antenna Gain	-3.07			dBi	Peak Gain
Antenna Polarization	Vertical				
ZigBee Transmitter Parameter	Value			Units	Comments
	Min	Typ	Max		
Output Power (Conducted)			19	dBm	Measured at room temperature
Frequency Stability	-40		+40	ppm	
Error Vector Magnitude		5	30	%	
Power Spectral Density/3kHz BW	6			dBm	
6 dB Bandwidth	1.59			MHz	Modulated
ZigBee Receiver Parameter	Value			Units	Comments
	Min	Typ	Max		
Sensitivity		-104	-101	dBm	At 35% PER
Adjacent Channel Rejection	40			dBc	
Image Rejection	30			dB	

GET IN TOUCH.

For more information and nationwide warranty terms, visit us at landisgyr.com or call us at 888-390-5733.



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Since 1896, Landis+Gyr has been a global leader of energy management solutions. We've provided more than 3,500 utility companies all over the world with the broadest portfolio of products and services in the industry. With a worldwide team of 1,300+ engineers and research professionals, as well as an ISO certification for quality and environmental processes, we are committed to improving energy efficiency, streamlining operations, and improving customer service for utility providers.