# .... Gridstream

# M120 Series 2-way Residential Gas Communications Module

The M120 Series Residential Gas Communications Module provides two-way communications within the Landis+Gyr Gridstream<sup>™</sup> RF network. The communications module provides a direct register read of the gas meter. The gas module records and communicates both total consumption and interval data (configurable from 15 to 60 minutes). The module can use any device within the Gridstream wireless mesh network – including electric meters, routers, mesh extenders or radios on distribution automation devices – to send and receive information.

The gas modules can be factory installed on new gas meters, and can be field retrofitted to the majority of Elster (American), Sensus (Equimeter/Rockwell), Itron (Actaris/Sprague/Schlumberger), and National meters built since the 1950s. Modules are battery powered with an expected battery life of 20 years within a standard operating profile.

Operating within the Gridstream network, the two-way module uses the unlicensed FCC part 15 902-928 MHz band to transmit using frequency hopping, spread spectrum technology. To efficiently manage energy consumption, the module is programmed to periodically report customer usage profiles and accept system configuration changes. The module is capable of storing more than one billing cycle's worth of gas daily reads.

## Fast, Easy Installation and Operation

- Auto-Registration
- No Field Programming or special field tools required
- LED verifies communication
- Over-the-Air Firmware Upgrade
- On-Request Reads



### **Key Benefits**

- Flexible solution allows support and field installations on all common gas meters
- Can use current index no need to remove index to install on most meters
- Intelligent module stores and transmits consumption and interval data
- A variety of alarm settings available to inform of module issues
- Module performs self-diagnostics and reports errors and low battery
- 250 mW output for enhanced range
- 20 year battery life for less maintenance
- Load and consumption data facilitate flexible rates and allow for more efficient capacity utilization and planning



#### **Meter Compatibility**

There are field retrofits to most small diaphragm meters provided by all leading gas meter manufacturers dating back to the mid-1950's including:

Model	Meter Manufacturer	
M120-1	Elster (American)	
M120-2	Itron (Actaris/Schlumberger/Sprague)	
M120-3	Sensus (Invensys/Equimeter/Rockwell)	
M120-4	National	

#### Alarms

Events configured as alarms can be: programmed to provide logs, be recorded and communicated in daily event flags, or be reported by transmission of a special event message. Some of the more common alarms include:

- Tamper Detection
- Low BatteryStale Register

Cover OffDownload Error

- Tilt SwitchConsumption Rollover
- Sensor Failure
- Extreme Temperature Change
- Configuration Change

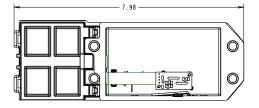
#### Specifications

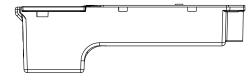
Transmit Frequency Range:	902-928 MHz
Modulation Type:	FSK Modulation
Baud Rate:	9600 to 38400 bps.
Power Supply:	Two "A" Lithium Manganese Dioxide Batteries, 20-year Battery Life
Operating Temperature Range:	-40°C to + 85°C
Relative Humidity	5% to 100%

#### Certifications

FCC Part 15.247
ANSI B109.1-2000 Compliance
ANSI B109.2-2000 Compliance
UL - Class 1, Division 1, Group D

#### American





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#### Sprague

