



## S610 RF Line Sensor



### *A Power Harvesting Line Sensor for Fault Detection and Overall Grid Resiliency*

#### Overview

The S610 Line Sensor is a plug and play, power harvesting fault circuit indicator that brings dependable fault location and accurate load logging to any point along the electric distribution network. Designed to work within the Gridstream® RF communications network, the S610 immediately puts specific alerts and actionable intelligence at the user's fingertips.

Sensing and measurement capabilities include current, conductor temperature and voltage characteristics in addition to GPS and a precision clock. Onboard intelligence and processing power enable the device to perform analysis at the point of installation while funneling only the most valuable information and alerts back to the utility over the Gridstream RF network.

Developed for a long, maintenance-free life, the line sensor's power harvesting technology generates all power needed for operation from the magnetic fields surrounding a conductor. A simple installation process via hot stick anywhere along the line, the S610 line sensor

requires no pole attachments or secondary power source. This line sensor is a simple and cost effective way to increase distribution grid management and performance for all utilities.

#### FEATURES & BENEFITS:

*Why Landis+Gyr makes a difference.*

- Plug and play, installs in minutes
- Power harvesting, no secondary power source needed
- Integrated Gridstream radio network communication
- Alerts with location and fault specific information
- Stores data and analyzes locally
- Identifies faults on feeders and laterals
- Measures current, voltage characteristics, conductor temperature
- Calibrated for NIST traceability
- Secure Bluetooth for local communications
- Over the air upgradeable
- Substation class instrumentation



**Specifications**

Part Number	01-1330 rev AA S610 Line Sensor
Size	8" x 4.5" x 5.5"
Weight	6 lbs.
Enclosure	Weather-proof
Qualifications	ANSI / IEEE 495-2007 / FCC Part B / salt fog environmental
Human Interface	Local LED fault indicator
Operating System	Secure embedded Linux, software over the air upgradeable
Current Fault Measurement	0 to 800A, up to 20kA RMS fault
Voltage Sensing/Characteristics	0-90kV / e-filed sensor measuring voltage presence, current direction
GPS	Lat/Long and precision time stamping
Conductor Temp Measurement	-40° F to 300° F (-40° C to 150° C)
Available Configuration	Hi-Perform for lines 0-100A, Hi-Amp for lines 0-800A
Operating Environment	4-69 kV, 0-100A (Hi-Perform) or 800A (Hi-Amp), sensor and comms at full power
Line Current Minimum	10-11 A (Hi-Perform) or 19-20A (Hi-Amp), sensor and comms at full power
Conductor Size	0.375" to 1.14" (up to 954 ACSR or AAC), 0.25" with armor rod
Local Communications	Secure Bluetooth
Network Communications	Landis+Gyr Gridstream radio
General Radio Items	Frequency range 902-928 MHz
	RF baud rate 9.6-115.2 kbps
	RF output power – selectable max. 27.8 dBm/600mW