

Meet Revelo®

The IoT Grid Sensing Meter



The Revelo metering family is the industry's first IoT grid sensing electric meters benefiting both utilities and their customers. Demands on the grid edge are changing – today's energy consumers want more insight and control to manage energy better. Enhanced reliability, safety, and the growing adoption of distributed energy resources (DER) require more than traditional meter-to-cash capabilities. Revelo is a true grid sensor, providing unprecedented insight and control through industry-leading waveform data technology, offering superior edge computing capabilities and a greater ability to sample, process, store, and deliver data to the right places in real-time.

FEATURES

- High resolution current and voltage streaming to an integrated Edge Intelligence Card
- Gridstream® Connect App OS enabled sensor
- Available in 200 amp and 320 amp disconnect to facilitate growth in load due to electrical vehicle chargers, heat pumps, etc.
- Millisecond resolution network time to aid phase and grid anomaly detection
- Micro arc sensing for early detection of hot socket conditions
- Wi-Fi Certified and internet-enabled open application ecosystem with third-party and utility partner application creation potential
- Communications flexibility
- Enhanced power quality and richer harmonics measurement
- High-resolution billing system (ready for the future of transactive energy)
- Wi-SUN certified to enable the future of Wireless Smart Utility Network interoperability

Revelo® – The IoT Grid Sensing Meter

PRODUCT SPECIFICATIONS

GENERAL	
Metering Features	<ul style="list-style-type: none"> • Standard Active and Reactive Metrics • Time-of-Use with perpetual Calendar • Load Profile <ul style="list-style-type: none"> – 2 independent recorders – 16 channels per recorder, 32 channels total – 2MB of interval memory with configurable allocation between recorders – Energy, demand, and PQ channel sources • Tamper Detection Features <ul style="list-style-type: none"> – Cover removal switch – Magnet tamper sensor – Meter removal and insertion detection – Meter inversion detection • Safety Related Features <ul style="list-style-type: none"> – Multi-sensor temperature monitoring – Micro-arc sensor – Meter orientation change detection – Form 2S virtual neutral for improved load-side voltage monitoring
SERVICE DISCONNECT SPECIFICATIONS	
200 Amp Disconnect	<ul style="list-style-type: none"> • 10,000 operations at 200 Amps <ul style="list-style-type: none"> – 5,000 open/close cycles (10,000 operations) • Available Forms: 1S, 2S, 12S, 25S
320 Amp Disconnect	<ul style="list-style-type: none"> • 6,000 operations at 320 Amps <ul style="list-style-type: none"> – 3,000 open/close cycles (6,000 operations) • Available Forms: 2SE
PERFORMANCE SPECIFICATIONS	
Accuracy Class	ANSI C12.1 Class 0.2%
Voltage Accuracy	+/- 0.2% typical
Frequency	Rated accuracy across 50Hz and 60 Hz +/- 5%
Starting Load (Watts)	<ul style="list-style-type: none"> • Class 100: 20 mA • Class 200: 40 mA • Class 320: 65 mA
Operating Temperature	-40C to +85C under the cover
Humidity	Up to 95% relative humidity, non-condensing
Design Life	20+ years
Over Voltage Withstand	Temporary (1/2 sec) 150% rated voltage Continuous (5 hours) 130% rated voltage
Voltage Burden	< 3.0 W max
Nominal Voltage	<ul style="list-style-type: none"> • Form 2S-SD / 2SE-SD: 240 VAC (line-to-line) • Form 1S-SD: 120V VAC (line-to-neutral) • Form 12S-SD / 25S-SD: 120 VAC (line-to-neutral)
Operating Voltage	• Nominal voltage +/- 20%

AVAILABLE FORMS			
Self-contained (S-base)	2S-SD, 2SE-SD, 1S-SD, 12S-SD, 25S-SD		
COMMUNICATIONS			
	Technology	Speeds	Output Power
Series 6 RF	IEEE 802.15.4-2015 900 MHz FSK/OFDM	50–2400 kbps	500 mW Max
Wi-Fi Certified	Certification ID: WFA118337	Up to 72.2 Mbps	32mW Max
Optical Port	ANSI C12.18	9600–38400 bps	N/A
EDGE INTELLIGENCE			
Operating System	Landis+Gyr Linux with App OS sandbox environment		
Streaming Sensor Data	<ul style="list-style-type: none"> • 14.6 kHz sampled voltage and current waveform data • 100ms aggregate metrology and sensor data 		
SECURITY			
Encryption	256-bit AES		
Wi-Fi	WPA2 & WPA3		
Digital Image Signing	Signature validation for all firmware and application images		
Physical Hardening	Port security and Data at Rest Encryption		
APPLICABLE STANDARDS			
ANSI C12.1	Code For Electricity Metering		
ANSI C12.10	Physical Aspects Of Watthour Meters - Safety Standard		
ANSI C12.18	Protocol Specification for ANSI Type 2 Optical Port		
ANSI C12.19	Utility Industry End Device Data Tables		
ANSI C12.20	American National Standard for Electricity Meters— 0.1, 0.2, and 0.5 Accuracy Classes		
UL 2735	UL Standard for Safety Electric Utility Meters		

GET IN TOUCH.

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



LET'S BUILD A BRIGHTER FUTURE TOGETHER

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.