

Solid State Residential Electricity Meters

Supplier of Choice

For over a century, Landis+Gyr has been an innovative leader in the meter industry. Today, Landis+Gyr continues to create cost-effective solutions that help utility companies better serve their customers.

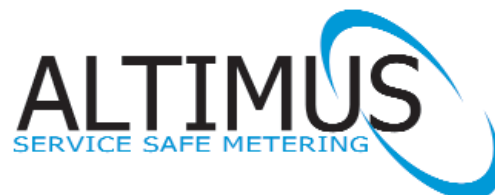
Keeping in step with the most up-to-date advancements in meter technology, Landis+Gyr offers the experience and expertise utility companies trust.

The Altimus Product Family

Landis+Gyr created the Altimus in anticipation of the changes affecting the electrical power industry. Its unique modular design allows for more efficient utility operation, less maintenance, superior accuracy and an easier and safer installation. These benefits help utility companies stay competitive by reducing overall operating costs.

The Altimus two-piece unit is comprised of a base and an interchangeable electronics module. This design allows for quick and safe upgrades in the field without the need for recalibration. When installation upgrades are needed, only the electronics module is changed. Upgrades can be performed without service interruption to the homeowner.

The Altimus meter also features Landis+Gyr's ServiceSafe™ technology which can be installed and serviced in the field under safe conditions. It allows for in-service removal of electronics modules while the



base remains sealed in position. This protects meter service personnel from exposure to the underlying electrical service.

The Altimus offers exceptional performance enhancements that enable utility companies to generate a cost-effective return on their investment. The Altimus is available with multiple register configurations, providing the right functionality for all metering applications.

AL Altimus

The AL Altimus is a kWh-only residential solid-state electricity meter. It has the two-piece modular unit design with the ServiceSafe electrical interface. The electronics module contains all measurement devices, displays and communication options specific to the information gathering and reporting needs of utility companies.

By utilizing sophisticated microprocessors and other advanced electronics, this module provides energy measuring functionality never before offered in a residential metering product. In addition, the electronics module can be easily upgraded as installation requirements change and technology advances in the future.



AL Altimus kWh-only meters can be upgraded by replacing the electronics module (top unit of two-piece meter) with an advanced-function unit (demand/TOU/load profile).

The AL Altimus also features a variety of performance enhancements such as:

- An optional KYZ pulse output that allows passing of pulse information to other devices
- Factory programming of a variety of display options which increase a customer's metering capabilities
- Digital Power Indicator on LCD

AXL Altimus

The AXL Altimus has a similar feature set to the AL, but it is upgradeable to demand/TOU/reactive functionality through the optical port via a software key. A demand reset cover with optical port is standard on the AXL Altimus.



AXL/AX Altimus meter is upgraded optically

AX Altimus

The AX Altimus is an advanced-function residential solid-state electricity meter. It is capable of providing advanced register functions such as demand, TOU and load profile data recording. Like the AL, the AX has the standard Altimus two-piece modular design with the ServiceSafe electrical interface. The AX Altimus was specifically created to be optically upgraded and customized using respective Landis+Gyr software packages.

The AX Altimus meter is designed with maximum flexibility to add functionality in the future and to include space for a variety of communication possibilities, such as the advanced high-speed modem and DCSI two-way power line carrier (PLC) communication technology.

Two optional programmable output boards provide Form C solid-state relays for sending pulses to remote sources. The relays can be programmed for KYZ-Ke, EOI, Demand Threshold Alert, Voltage Threshold, Diagnostics and Load Control. Available Options are:

- 1 Relay Output
- 2 Relay Outputs and 1 External Input

AX Altimus meters are available with an optional 32K or 128K of load profile memory. Any combination of up to 15 metrics can be recorded from a list of 24 possible choices.

Additional Features:

- Interchangeable electronics modules based on meter form and voltage. (requires no calibration)
- Capable of metering either active energy (AX register type) or reactive energy (RX register type)
- The active energy register (AX) can be upgraded to a reactive (RX) by means of a software key
- Register supports self-reads (AXR/RXR)
- GyrBox diagnostics including:
 - Voltage phase angles
 - Voltage deviation
 - Inactive phase current

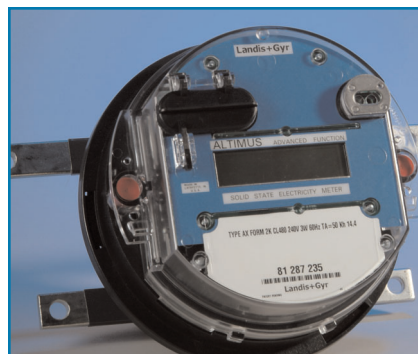
- Phase angle displacement (current)
- Current imbalance
- Energy polarity
- User configurable using Landis+Gyr DG1100 DOS based and/or 1132Prog and 1132Com Windows™ based software
- Available with the Landis+Gyr Advanced High-Speed Modem (outbound and inbound) 9600 Baud
- Automatic call in conditions:
 - After power fail
 - Low battery
 - Demand overload
 - VTA exceeded
 - Diagnostic alerts
 - Meter error codes
 - External Input

Extended Range Altimus 2K

The Altimus 2K is a self-contained meter designed for Class 480 installations. The meter is capable of metering intermittent loads up to 600A peak and is available with either the AL or AX/RX register.

With the Altimus 2K self-contained meter, costly external current transformer (CT) wiring errors are eliminated and installation time is reduced. No CT installation is required because a CT is contained within the meter base. Put it all together for a neater installation that is less costly and more accurate.

The Altimus 2K meter's accuracy over its entire load range is better than 0.50 percent. The Altimus 2K offers both improved accuracy and increased load current capacity over its predecessor the MS-2K.



Security Options	Seals: Security cap over cover rivet Wire seal through cover security tab and base plate T-seal for use with security tab covers Cover: With security tabs: After meter seals and rivets are removed, prevents cover removal without first opening mounting device cover or removing socket ring Without security tabs: After meter seals and rivets are removed, permits cover removal without opening mounting device cover or removing socket ring
Applicable Standards	ANSI C12.10: 1995 for electricity metering ANSI C12.10: 1997 for watt-hour meters ANSI C12.20: 1998 for solid-state electricity meters CAN 3-17-M84: Canadian specification for approval of type of electricity meters CAN 3-Z234.4-79: Canadian specification for all-numeric dates and times
Application Information	Frequency 60Hz +/-5% Nominal Voltage 120V/208V, 240V Operating Temperature -40°C to +85°C Humidity <95% relative humidity non-condensing Class 20, 200 & 320 Meters +/-0.2% Class 480 Meters +/-0.5%
Rated Accuracy	Starting Load: Class 10 & 20 120V Meters 0.5W Class 10 & 20 240V Meters 1.0W Class 100 Meters 3.6W Class 200 Meters 15W Class 320 Meters 23W Class 480 Meters 38W Meter Burden: <1.8W, <3.0 VA
Available Forms	1S 120V Class 100 3S* 120V Class 10 and 20 2S 240V Class 200 3S* 240V Class 10 and 20 2SE 240V Class 320 4S 240V Class 10 and 20 2K 240K Class 480 (600A Peak) 12S*/25S 120V Class 200 (Network) *3S and 12S base module features a moveable 5th terminal



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