



Landis+Gyr E450

Advanced Residential Meter with
integrated PLC modem

Cost-efficient fully integrated solution integrating core functionalities in one device: powerful e-metering, multi-energy data collection, remote two-way communication and end user interaction

Best total cost of ownership: sustainable design, long life, easy to install and maintain

Future-proof meter that can be customized and upgraded for future market needs

Optimized grid asset management enabled by the meter's interoperable infrastructure

Improved network control and demand response via integrated load management technology

Increased energy efficiency and customer service achieved through added-value personal energy management functionalities

The key component of our smart grid solution Gridstream™

The E450 meter has been designed to provide you with the maximum flexibility in functionality and infrastructure needs. To comply with the energy industry regulations, E450 will enable a more accurate consumption-based energy profiling, optimized network control and demand response as well as higher consumer engagement.



The meter communication interfaces are based on open standards. This allows you to combine third party applications in your advanced meter infrastructure.

We aim to provide you with the best total cost of ownership. Thanks to its sustainable design the E450 meter is easy to install and maintain throughout its long lifecycle.

Advanced meter

- Single- and polyphase direct connected meter
- MID B bi-directional active and IEC-class 2 reactive energy measurement
- Rated registers controlled by real-time clock and calendar
- Energy profiling: three independent profiles for electricity configurable by content
- Four independent profiles for multi-energy values
- Logging for meter events, power quality, disconnecter states, anti-tamper and multi-energy events
- Standardized security system
- Demand supervision unit
- Firmware upgrade possibility
- Integrated disconnecter and up to two relays for appliance load controls



Communication

Power line carrier (PLC)

The E450's communication system is based on International Electrotechnical Commission (IEC) open standards (IEC 61334) and DLMS/COSEM protocols. The integrated PLC modem will provide the best cost of ownership in large scale smart metering rollouts.

GPRS/UMTS

The E450 meter provides a modular GPRS/UMTS communication solution. The communication module is exchangeable and has an integrated antenna. Alternatively, one can use an external antenna that is easy to install and maintain. The solution is designed to deliver a wide range of services at a low communication cost.

Local communication

Meter has an additional optical port supporting IEC 62056-21 and DLMS readout commands. Parameterization can be handled locally according to predefined security settings.

End user interaction

The E450 meter enables real time interaction with end users. With an elegant and timeless design your customer will have a new experience when looking at the energy meter. The front cover slider allows you to personalize the look of the meter, while your installers can access the technical nameplate and optical interface by moving it down.

An optional integrated wireless interface enables bi-directional communication with our ecoMeter in home display. Customized messages can be shown on the meter display or sent to the ecoMeter.

Multi-energy data collector

The E450 meter can act as a gateway for collecting data and interacting with other energy meters, like gas, water or heat.

E450 (1phase) PLC
E450 (3phase) PLC
E450 (3phase) 2G/3G

		E450 (1phase) PLC	E450 (3phase) PLC	E450 (3phase) 2G/3G
Connection type	Direct connection 5 (80) A	■	■	■
	Direct connection 5 (100) A	■	■	■
Accuracy class	Combined meter active energy class 1 (IEC); A (MID), reactive energy class 2	■	■	■
System interface	PLC interface	■	■	■
	2G/3G interface	■	■	■
User and wireless interface	Optical + wireless M-Bus (868MHz)	■	■	■
Local interface (daughter board)	Wired M-Bus	■	■	■
Disconnecter	1-pole disconnecter (live only)	■	■	■
	3-pole disconnecter (live only)	■	■	■
Digital output	with 90mA relay option	■	■	■
Digital input	1 digital input	■	■	■
Outputs	1 Bistable relay 8 A, 230VAC + 1 digital output 100 mA, 230VAC	■	■	■
	1 Bistable relay 8 A, 230VAC + 1 latching relay 5 A, 230VAC	■	■	■

■ available
■ not available
■ optional

E450 is an advanced residential meter, which integrates core functionalities, such as powerful e-metering, multi-energy data collection, remote and local communication and end user interaction. This innovative metering device has been developed as a new system component of the Landis+Gyr's smart grid solution Gridstream to optimize daily utility processes.

- Flexible multi-energy metering data collection and interaction with other electricity, gas, heat and water meters
- Fully integrated two-way communication over a combination of PLC and modular GPRS/UMTS technologies
- Interoperable interface based on open DLMS/COSEM standards
- Modern upgradeable infrastructure
- Load management functionalities
- Wireless interface for bi-directional communication with the personal energy management devices

Manage energy better

Landis+Gyr is the leading global provider of integrated energy management products tailored to energy company needs and unique in its ability to deliver true end-to-end advanced metering solutions. Today, the Company offers the broadest portfolio of products and services in the electricity metering industry, and is paving the way for the next generation of smart grid.

With annualized sales of more than US\$1.5 billion, Landis+Gyr, a standalone growth platform of the Toshiba Corporation (TKY:6502) and 40% owned by the Innovation Network Corporation of Japan, operates in 30 countries across five continents, and employs 5,000 people with the sole mission of helping the world manage energy better.

More information is available at landisgyr.com.

Landis+Gyr in short

- 5000 employees worldwide
- Operations on all five continents
- Broadest portfolio of products and services in the industry
- 25 years of smart metering experience
- 1000 AMM systems delivered
- 300 million energy meters produced
- Largest relevant engineering capacity in the industry
- 65 years of direct load management experience
- 15 million load management receivers produced
- ISO certified for quality and environmental processes
- World leader in integrated energy management solutions
- Committed to improved energy efficiency and environmental conservation
- Solid and established partner network

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