

Electricity Meters
Grid metering

Landis
Gyr+
manage energy better



Electricity Meter ZMQ200

Increased revenue through
high accuracy, tailored
grid functionalities and
savings in maintenance

Landis+Gyr ZMQ200 is our latest electricity grid meter providing increased cost-effectiveness and process efficiency in the precise metering of large energy quantities.

With its excellent measuring properties, exceptional precision, and reliability, you are equipped for both simple and complex metering tasks. Additionally, this meter also provides a future oriented communication protocol, while offering complete compatibility with pre-installed metering equipment.

No-one can tell what the market will require tomorrow. A precision meter with tailored functionalities and independent communication channels for future demands helps to increase your revenue.

- Highest accuracy under all operational conditions
- Flexible software configuration for every application
- Three independent communication channels for different users
- Power quality values for grid application needs

Application

- Generation, transmission, substation grid connected I&C consumers
Class 0.2S/0.5 Active, 0.5S/1 Reactive
- For all networks, voltages and currents

Interfaces/Communication

- Up to eight transmitting contacts and three independent communication channels, DLMS protocol

Innovation for greater competitiveness

A high-precision meter for production and transmission applications, as well as the facilities of major consumers. These meters should deliver precision, long-term stability and reliability. We deliver a metering system with the highest resolution and measuring dynamics, and a profile memory with short capture periods. Our meter sets new standards delivering functionality that meets the highest demands for high-precision metering.



Basic Functionality

Measurement	Nominal current 1A or 5A set by parameterization Highly stable immune measuring processing Transmitting contacts
Power Supply	3-phase from measuring-circuit voltage and additional power supply
Recording	Two independent profiles 8 Mbyte memory for profiles and status 8/16/36 measurement channels with total registers 24 energy registers for tariffs 36 diagnostic registers Event log Monthly and daily profiles for indices
Feature	Real-time clock with power reserve Power quality values (dips und THD) Instantaneous voltage and current values (e.g. primary values) Optical interface according to IEC62056 Backlit display
Housing	Wall mount f6 Rack mount f9 with Essailec connector Utility sealed battery box



Basic Configuration

		ZMQ202C.2	ZMQ202C.4	ZMQ202C.6	ZMQ202C.8
Application	Transformer-operated meter for voltage and current transformer connection	■	■	■	■
Measuring accuracy	Active energy, class 0.25	■	■	■	■
	Reactive energy, class 1.0	■	■	■	■
	Reactive energy, class 0.5	■	■	■	■
Communication	Integrated RS485 interface with DMLS	■	■	■	■
	Integrated RS485 interface with IEC870	■	■	■	■
Software Configuration Parameters	Energy profiles (original meter values)	■	■	■	■
	Time-of-use (TOU)	■	■	■	■
	Operating events and alarms	■	■	■	■
	Voltage and current monitoring	■	■	■	■
	Line and transformer loss measurement	■	■	■	■
	Voltage dip table	■	■	■	■
	Total harmonic distortion THD	■	■	■	■
	Tariff control	■	■	■	■
	CT/VT error correction	■	■	■	■
	Network quality module (option) ¹⁾	■	■	■	■
	Bypass feeder operation	■	■	■	■
	Delta values	■	■	■	■
	Average demand, Pmax	■	■	■	■
	Apparent energy measurement, power factor	■	■	■	■
	Single-phase energy measurement	■	■	■	■
	Status contacts (optional)	■	■	■	■
- Integration period	■	■	■	■	
- Power threshold	■	■	■	■	

Selectable Communication

	B4	E22	G22	M4 / M22	P32
RS232 Interface	■	■	■	■	■
RS485 Interface	■	■	■	■	■
PSTN-Modem	■	■	■	■	■
GSM-Modem	■	■	■	■	■
Ethernet TCP/IP	■	■	■	■	■
GMS/GPRS-Modul	■	■	■	■	■

Communication

Only reliable, total availability of precisely measured data provides the prerequisites for an efficient data processing and billing process. In order to meet your communication needs both now and in the future, the meter features the DLMS protocol. This protocol provides transmission of original meter values to the central station (according to STOM method). With the integrated RS485 interface a direct link to other meters is possible without the use of a communication unit. A module is only required for communication with the central station. For existing installations with FAG using serial communication, only type C.2 is available.

All necessary communication applications are covered by a small number of units. This modularity also offers you full freedom of choice for deploying new technologies.

¹⁾ Not available in all countries

Additional registers allow you to provide a large selection of measured quantities adding value to your service. Diagnostic values with threshold registers allow for a comprehensive analysis of the supply. Operational irregularities are also detected, stored, and transmitted. Enhanced operating and installation support simplifies the installation and service.

Our meter provides important functions for measurement in high voltage networks. These include alarms and operating events for network monitoring and additional power supply for remote meter reading when the measuring circuit voltage is off.

Additional Functionality

Measured Quantities	<ul style="list-style-type: none"> ■ Instantaneous values for voltage, current, phase angle, power factor (all phases), frequency ■ THD as a percentage or kWh of active energy
Network monitoring	<ul style="list-style-type: none"> ■ Alarm indication with alarm contact ■ Operating event indication with contact phase failure and current without voltage in individual phases ■ Self-test function ■ Regular testing of all memories ■ Voltage, current ■ Frequency ■ Demand
Additional power supply	<ul style="list-style-type: none"> ■ Special operating mode for low loading transformer leads ■ Status information if voltage present
IEC870	<ul style="list-style-type: none"> ■ Communication unit with subset of IEC870-5-102 for communication with existing IEC870 central station ■ Special meter C.2 for connection to existing FAG

Software Tools

MAP 120	<ul style="list-style-type: none"> Creation of parameterization files Communication settings
MAP 110	<ul style="list-style-type: none"> Installation support Primary data adaptation Meter data readout Load profile analysis DIP table visualisation

Manage energy better

We deliver peace-of-mind when it comes to managing your energy. Decades of leadership in technology and in-depth knowledge at Landis+Gyr means we are able to offer you an extensive, high quality and proven portfolio.

Obtaining the highest level of energy efficiency has never been easier. We have translated our unique expertise of utility processes into integrated energy management solutions and we can help you streamline your processes, increase customer loyalty and secure revenue.

Let us tailor our innovative solutions to meet your specific needs. Whether electricity, water, heat/cold, gas metering or load management, we provide what you need to ensure that your energy is managed with increased precision and reliability.

With Landis+Gyr as your trusted partner, you can manage energy better.

Landis+Gyr in short

- More than 5000 employees worldwide
- Operations on all five continents
- Broadest portfolio of products and services in the industry
- 25 years of AMM experience
- More than 1000 AMM systems delivered
- More than 300 million meters produced
- Largest relevant engineering capacity in the industry
- ISO certified for quality and environmental processes
- Contributor to more efficient use of resources and hence better environmental outcomes
- World leader in integrated energy management solutions

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