# **Analytics**

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Unlock the Power of Data with Landis+Gyr's Analytics Solutions



## Landis+Gyr

## **Drive Efficiency and Enhance Reliability through Actionable Insights**

As the energy landscape evolves, utilities face the growing challenges of optimizing grid performance, managing an unprecedented number of distributed energy resources, and meeting the increasing expectations of customers for reliability and increased engagement.

Landis+Gyr's Analytics Solutions unlock smarter, faster, and more data-driven decisions by turning the growing volume and flow of data into actionable insights—delivering increased grid reliability, resiliency, and consumer empowerment.

### An Al-powered, Cloud-based Analytics Platform

Landis+Gyr's Analytics Solutions offer a comprehensive AI-driven Software as a Service (SaaS) suite that transforms complex data into clear, actionable insights for you and your consumers. From detecting outages and pinpointing power quality issues to optimizing load management and EV detection, our secure platform empowers you to act swiftly, minimizing downtime and improving service reliability.

#### Landis+Gyr's Analytics Platform Empowers You to:



Seamlessly integrate data from various utility sources to ensure comprehensive insights to inform real-time decision-making.



Access the solution from any location with cloud-based SaaS deployment, complying with your specific accessibility requirements.



Improve grid visibility and more efficiently handle growing DER assets by harnessing AI and Machine Learning capabilities across multiple use cases.



Readily identify assets such as EVs, analyze capacity contributions, and protect your revenue through advanced pattern detection features.

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Assess and validate the accuracy of critical models such as meter-to-transformer mapping and phase identification.



Effectively prioritize your resources through platform visualization that provides a holistic network view.



Increase consumer involvement and improve grid adaptability with data analysis across gridand consumer-side apps.



Take advantage of cutting-edge data protection and cybersecurity features.

#### Flexible, Scalable Deployment Options

Landis+Gyr's Analytics Solutions offer flexible purchasing options, allowing you to deploy individual modules based on current data analysis needs and easily add more modules and capabilities as your use cases evolve.

In addition to modular options, you can leverage the **Standard Package** for essential metering analytics and reporting or upgrade to the **Enhanced Package** for integrated metering, planning, and operational analytics.

#### STANDARD PACKAGE

#### **Metering Analytics & Reporting**

Modules shown also available for purchase à la carte

#### **Limited GIS Integration Required**

Integration with historical meter voltage, consumption, and events enables the following modules:

#### **Pattern Detection**

Enables the early detection of anomalies and irregularities in consumption data, allowing you to take timely action to address issues such as theft, malfunctioning meters, or other abnormal patterns.

#### **Voltage Performance**

Detects meters showing abnormal voltages on the distribution network.

#### **Energy Diversion**

Locates areas where energy theft or technical losses may be occurring and estimates the corresponding loss in revenue.

#### **Capacity Contribution**

Identifies customers' meter contribution to demand during peak demand and over time.

#### **Power Quality**

Tracks the status of the network, monitors and reports any event that meets predefined criteria. Identifies and addresses quality degradations before serious impacts, reduces operational cost, and improves customer complaint process.

#### **Phase Identification**

Leverages AMI data to flag meters that are incorrectly assigned to a given phase and provides recommendations for the right phase connection.

#### **Meter-to-Transformer Mapping**

Identifies meters falsely mapped to distribution transformers and identifies which transformers they are attached to.

#### **EV Detection**

Identifies residential customers adopting EVs, analyzes and tracks EV trends across the network to predict potential congestion points.

#### ENHANCED PACKAGE

#### Integrated Metering, Planning, & Operational Analytics

Modules shown also available for purchase à la carte

#### **Full GIS Integration Required**

Building on the required integration for the Standard Metering Analytics package and adding asset connectivity, capacity, impedance, and historical reliability data (including outage events and reliability indices), enables the following modules:

#### **Full GIS Model Validation**

Identifies meter-transformer mapping as well as asset rating issues and gaps in the connectivity model and evaluates power flow convergence.

#### **Loading Performance**

Identifies overloaded and underutilized devices to gauge performance across the asset base.

#### **DER Capacity Planning**

Tests various loading and control scenarios to address capacity bottlenecks, mitigate equipment failure, and support DER integration.

#### **Transformer Loss of Life**

Determines transformer degradation using historical loading and physical characteristics.

#### **Reliability Performance**

Processes historical outage data system-wide to calculate SAIDI, SAIFI, CAIDI, MAIFI, and unserved energy.

#### **Reliability Planning**

Tests various reliability projects to estimate their technical impact based on historical outage events.

#### **Project Prioritization**

Calculates the return on investment of various reliability and non-wires alternative projects to optimize budget allocation.

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## Achieve Reliability, Resiliency, and Consumer Engagement with Landis+Gyr's Analytics Solutions

Our cloud-based solutions ensure the ready accessibility and security of our advanced analytics functionality, leveraging AI and ML capabilities to improve the accuracy of recommendations and predictions across the board. Our modular approach enables you to address the use cases most important to you today, and easily expand your analytics toolkit to model, monitor, and analyze the impact of new use cases as they evolve. This powerful approach enables you to effectively handle the many challenges of the energy transition, from the increase of energy consumption due to electrification, to the growth of distributed energy resources on the grid, and the cost-effective integration of EVs and renewables into the network. From the grid edge to the enterprise level, Landis+Gyr's Analytics Solutions empower you to meet your most challenging reliability, resiliency, sustainability, and economic objectives.



#### 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.