

## **Advanced Load Management for Dynamic Grid Control**

### **Built for Control. Ready for Flexibility.**

As the demands on electricity networks grow, so does the need for smarter load control. Static switching simply isn't enough to manage the complexity introduced by decentralised energy, electric mobility and real-time balancing needs.

Landis+Gyr's L440 and L540 Control Switches deliver intelligent, automated load switching for residential, commercial and public infrastructure, enabling demand-side flexibility, distributed load control and system-wide optimisation.

Each device supports secure communication, local decision-making and seamless integration with metering and control systems.

#### 1440

L440 uses LTE CAT M1 or NB1/NB2 to reach distributed assets over existing mobile networks, ideal for sites where fast deployment and data transfer is key.

#### L540

L540 communicates via G3-PLC, making it the right fit for environments where power line communication is already established or preferred for network consistency.

By offering both options, Landis+Gyr enables providers to adapt to local conditions without altering strategy or switching system architecture.

### Where Our Load Switching Devices Unlock Flexibility

L440 and L540 enable secure, real-time load management and flexibility services within Landis+Gyr's Gridstream® and GridFlex Control platforms, helping energy providers across Europe optimize assets, enhance grid efficiency, and unlock new flexibility potential:



## Managing Heat Pumps & Water Heaters:

By shifting the operation of thermal loads to off-peak periods, reduce pressure during high demands.



# Coordinating EV Charging Loads:

Smart switching schedules avoid local congestion during charging peaks, ensuring stable grid operation even as electric mobility grows.



# Activating Flexibility Assets for Market Services:

Through dynamic load control, utilities can unlock flexible assets for participation in balancing services and new flexibility markets.



# Automating Street Lighting Management:

Night-time lighting schedules based on an astronomical clocks in the device and real-time commands reduce energy usage without compromising public safety.



#### **Reducing Operational Costs:**

By minimizing the need for balancing energy through accurate forecasting and optimized load control, energy procurement and trading expenses are decreased.



# Supporting Load Shedding & Grid Congestion Mitigation:

Devices enable fast disconnection or adjustment of distributed loads during emergencies or network constraints.

#### **Security and Resilience**

L440 and L540 are built on DLMS/COSEM standards, ensuring compatibility with smart metering systems and high data security. They support encrypted communication, authenticated access, and role-based controls under DLMS Security Suites 0, 1, and 2.



Tamper detection and event logging provide full auditability, while autonomous operation with onboard logic and RTC power reserve ensures control continuity during outages. Remote diagnostics, firmware management, and field visibility tools enhance reliability and simplify compliance. Designed for long-term performance, these devices offer robust protection and operational integrity in dynamic grid environments.

#### Let's Build a Brighter Future Together.

### Landis+Gyr

Landis+Gyr is a leading global provider of integrated energy management solutions. We measure and analyze energy utilization to generate empowering analytics for smart grid and infrastructure management, enabling utilities and consumers to reduce energy consumption.

Our innovative and proven portfolio of software, services and intelligent sensor technology is a key driver to decarbonize the grid. Having enabled 9 million tons of CO2 savings in FY 2024 through our product offering, Landis+Gyr manages energy better – since 1896.