

LANCOM Active Power Control

Objectives of Active Power Control (APC)

LANCOM Active Power Control (APC) is a software solution that provides LMC administrators with tools to efficiently monitor, manage, and optimize the energy consumption of LANCOM network equipment—directly from the LANCOM Management Cloud.

APC pursues two goals: First, to offer a central platform that enables administrators to configure the energy-saving functions of the devices as needed. Second, to provide detailed insights into project energy consumption, broken down by sites and device types, to facilitate informed decisions about the network’s energy management.

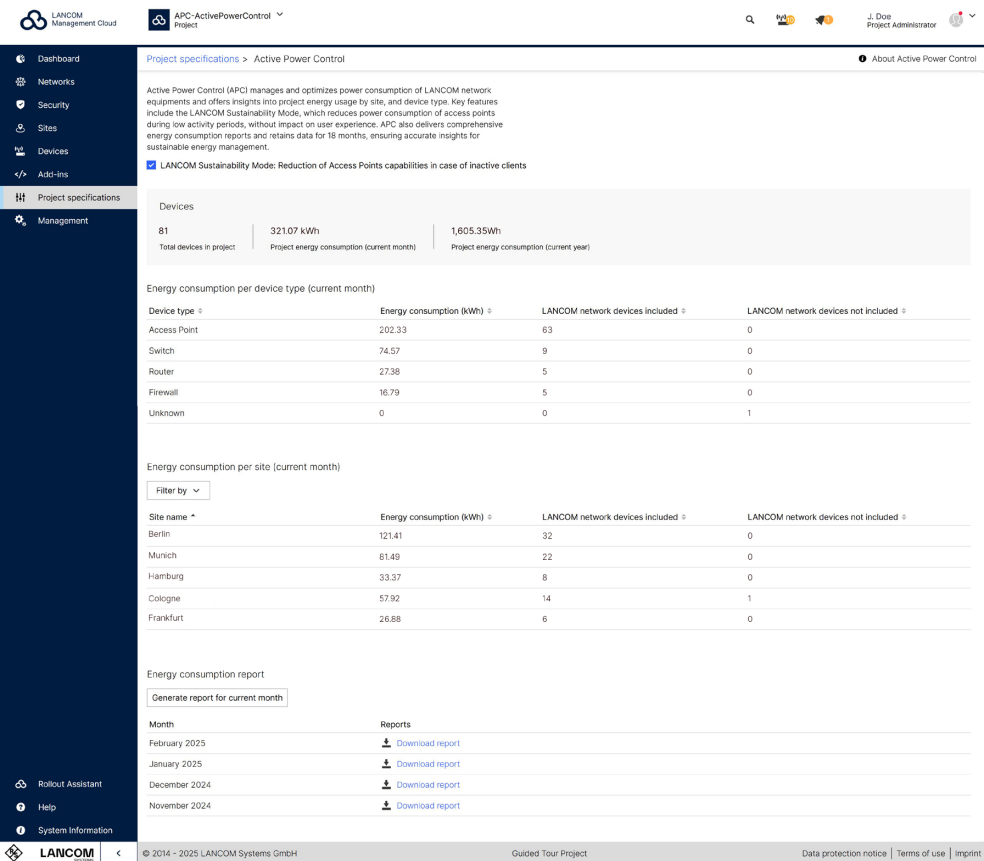


Figure 1:
Overview of energy consumption

Intelligent energy-saving function for access points

APC offers the energy-saving feature “LANCOM Sustainability Mode”. This mode intelligently reduces the number of antennas used by access points during periods of low client traffic, both for transmission and reception. This lowers power consumption without compromising performance, ensuring that the connection to the access point is maintained at all times and that the Wi-Fi range remains unaffected. All configured SSIDs continue to be broadcast.

Newly created projects have the LANCOM Sustainability Mode enabled by default. To deactivate the energy-saving feature, the corresponding option can be deselected.



Any change automatically triggers the creation of a new configuration, applicable for all compatible access points in the project.

Energy consumption overview and calculation methods

APC provides a comprehensive overview of energy consumption and enables analyses at various levels, such as by project, site, and device type. Monthly and yearly views of energy consumption help identify trends and opportunities for improvement.

Widgets offer a quick overview of key energy consumption metrics, while detailed reports in Excel format can be downloaded for deeper analysis. These reports include only LANCOM devices with an active connection to the LMC, ensuring that the data accurately reflects the current operational status of the network.

APC distinguishes between different measurement methods. The most accurate measurements come from devices with an integrated power meter, where energy consumption is recorded at a sampling rate of one minute. For devices without an integrated power meter, energy consumption is estimated based on the idle power consumption and the measured online time of the devices. Older models that have already reached end-of-life status and whose performance data cannot be measured or estimated are recorded with a consumption of 0 kWh.

Additionally, energy data is stored for 18 months, even if a site or device is deleted, to ensure the accuracy of reports at the project level.



For simplicity, the energy consumption widgets display only the values for the current month and exclude data from unassigned devices as well as from deleted sites. However, all details remain fully visible in the Excel monthly consumption reports.

Detailed device data and visualizations are available in the energy consumption reports for more in-depth analysis.

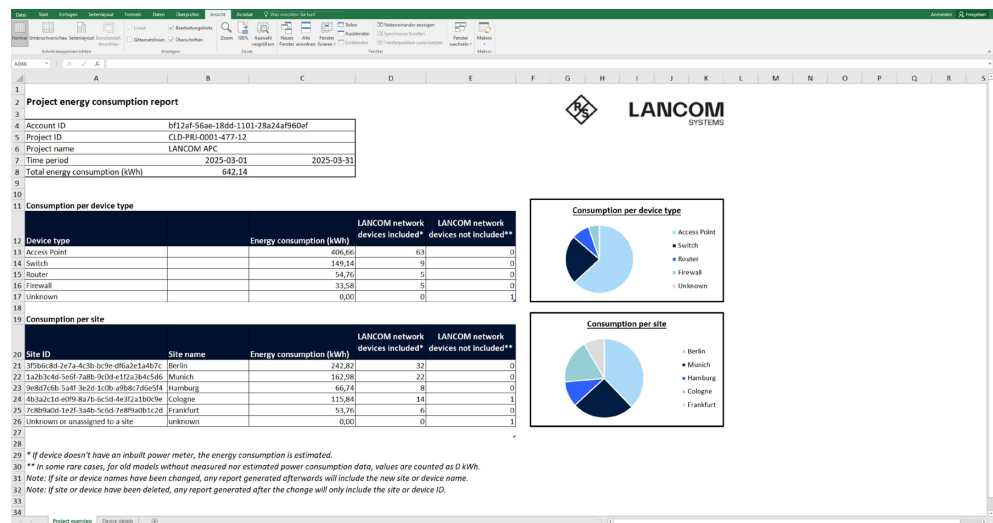


Figure 2:
Energy consumption report

Stay tuned

With Active Power Control, companies can maintain control over their network's energy consumption. By leveraging features such as the LANCOM Sustainability Mode and accessing detailed insights into energy consumption, significant progress can be made towards more sustainable and cost-efficient operations.

Future enhancements will further improve the ability to effectively manage energy consumption and provide additional innovative functions. Look forward to future updates with additional energy-saving features, deeper insights into energy reports, and new energy-saving models.

