



Reduce energy costs by 30%

How to better monitor, optimize, and control any electrical system, anytime.

Introduction

An easier way to understand power.

Within industrial and commercial buildings, facility engineers, operations, and maintenance teams are inundated with electrical distribution needs — all while they're expected to maintain and reduce costs associated with inefficiencies.

They face growing difficulty understanding electrical performance, peak trends, and power factor and quality information. At the same time, they also struggle to increase efficiency when monitoring loads from electrical systems, and minimize the time they waste on insecure, unreliable on-site-only assessments.

But if they're to effectively monitor and analyze energy consumption on demand and provide real-time insights for optimization, they need to invest in complex, time-consuming, and expensive on-site solutions.

How can it be ensured that teams are able to utilize the best tools to analyze energy performance data, management, and cost allocation in a secure, comprehensive platform?

To save time when analyzing energy consumption on-site, your teams need to be able to:

- **Stay current**
Keep up-to-date with actual performance of various systems.
- **Remain adaptable**
Gain flexibility within roles to be able to efficiently analyze and perform off-site audits.
- **Access data**
See real-time data and historical trends on a single- and multi-site level.

To do so, they need a solution that can identify energy generation and consumption issues that could affect operating costs, ensure site availability and productivity, monitor high-energy demand processes, and secure data within the cloud.

Fortunately, one such solution exists.



ABB Ability™ Electrical Distribution Control System

See how to reduce energy cost by 30%

Meet the modern, cloud-based answer from ABB that collects, monitors, and analyzes energy consumption and demand, providing real-time insights for optimization. By leveraging Microsoft Azure, this solution works in tandem with a state-of-the-art cloud architecture for secure data collection.

ABB Ability™ Electrical Distribution Control System (EDCS) is a cloud-based solution that enables site managers to simplify and reduce operational

costs — while supporting sustainability ambitions. It provides a flexible, plug-and-play, cost-effective solution for energy and asset management - without on-premises IT architecture implementation. With smart and connected products that offer embedded sensing and connectivity capability to Azure platform as a service (PaaS) ABB Ability Platform, EDCS can reduce energy costs up to 30% by highlighting unwanted or hidden energy leakage.

In short, EDCS ensures your teams are able to:



Monitor and access data
Securely and in real time.



Reduce spending
Cut costs associated with inefficiencies and energy consumption.



Keep control
Ensure energy and asset management stays safe thanks to alarm and notification system.

With EDCS, your teams are better situated to:



More easily identify issues
Pinpoint energy generation and consumption issues affecting operating costs.



Enable efficiency
Ensure and enable site availability and productivity.



Monitor effectively
Track necessary high-energy demand processes more easily.



Access your data in real-time

ABB Ability™ EDCS enables simplified and enhanced management of your low-voltage power distribution system. Your teams are able to easily access all relevant energy consumption information — at a glance — to maximize reliability and efficiency.

They can also use energy performance data to set effective benchmarks and align operations with best practices, and simplify and enhance the analysis of power factor compensation, energy management, and cost allocation. Lastly, they can leverage a comprehensive collection of data at the single- or multi-site level to more easily inform decisions around energy performance.

Keep the situation under control — anytime, anywhere

ABB Ability™ EDCS presents all relevant information at a glance. Put the simplest tools into your teams' hands to maximize reliability and efficiency, identify room for improvement, and implement the effective strategy for power peak control, energy management, and demand-response applications.

- **Simple load management**

Ensure load management is simple, accurate, and remote via the Power Controller feature.

- **Remote, targeted settings**

Remotely set the power demand you want to target with a weekly, daily, or hourly resolution.

- **Customized alerts**

Easily customize alert settings to suit your specific requirements and prompt key personnel to take action at a moment's notice.

- **Reduce maintenance costs**

The ABB Predictive maintenance algorithm makes maintenance smarter, quicker, and less expensive enabling the users to remotely monitor the health of their power system providing an accurate predicting maintenance analysis and optimizing service intervals only when needed.

Monitor plant performance — comprehensively

ABB Ability™ EDCS Alert Center provides your teams with a plant watchdog, customizing alert settings according to specific needs. Moreover, key personnel can take swift action at any time, thanks to immediate notifications via text messages and email. This way, you can check up on the electrical systems any time, identify abnormal operations, and proactively restore performance.

Gain immediate access to critical energy performance data across every facet of your facility via an intuitive user interface. Access energy consumption and on-site power generation trends through processed single- or multi-site information. Find knowledge at a glance — from the main feeder, all the way down to the lowest consumption branch of the electrical system and, acquire a deep knowledge of the electrical performance through supervision of real-time power demand, peak trends, and power factor and quality information.

Keep customer's site or facility data secure

In partnership with Microsoft — leveraging Microsoft Azure — ABB Ability™ EDCS is built on state-of-the-art cloud architecture for secure data collection that can be accessed anywhere via a flexible platform, thus solving electrical distribution challenges at any scale. Moreover, thanks to ABB's Data Manifesto, your customers are the only owners of their data.

Through Microsoft Azure technologies and PaaS capabilities, ABB Ability™ benefits from the scalability model offered with the cloud platform. Azure provides a strong Internet of Things (IoT) platform that's ideal for ingesting and analyzing vast amounts of data at scale. Thanks to the underlying Azure platform, teams can provision a new managed site within minutes, rather than days — all through a multi-site, elastic approach. Additionally, the consumption-based model offered by Azure aligns with EDCS's software-as-a-service (SaaS) subscription-based model, enabling a more cost-effective service delivery. With Azure datacenters available in 56 regions worldwide, it's possible to offer EDCS from almost any country in the world.

Contact an expert today



Write a smart, safe, sustainable future with ABB

ABB is a technology leader that is driving the digital transformation of industries.

With a history of innovation spanning more than 130 years, ABB has four customer focused, globally leading businesses: Electrification, Industrial Automation, Motion, and Robotics & Discrete Automation, supported by the ABB Ability™ digital platform. ABB operates in more than 100 countries with about 147,000 employees.