



LOW AND MEDIUM VOLTAGE

ABB Ability™ Energy and Asset Manager

Understanding power and assets

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ABB Ability Energy and Asset Manager



ABB Ability™ Energy and Asset
Manager is the state-of-the-art
on-premise and cloud solution for
monitoring and analyzing site
equipment. This intuitive solution
has the ability to optimize your site's
electrical distribution system and
other utilities, resulting in improved
performance, efficiency and safety.

Through its scalable and flexible design, ABB Ability™ Energy and Asset Manager ensures comprehensive accessibility and is ready-to-use with low- and medium voltage electrical distribution as well as of water, gas or heating equipment.

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Overview

A new approach to energy and asset management

ABB Ability™ Energy and Asset Manager is a state-of-the-art on-premise and cloud solution that integrates your energy and asset management in a single intuitive dashboard.

Providing full remote visibility of asset and electrical-system behavior, this solution provides you with the insight to minimize cost and risk and maximize performance and safety across your operations.

This is achieved by supervising your electrical system and monitoring its conditions and energy flows. The solution also verifies asset health and visualizes your system structure to provide actionable insights that enable maintenance and replacement at the optimum time.

By constantly analyzing asset conditions and energy demands, ABB Ability $^{\text{TM}}$ Energy and Asset Manager helps you make the right decisions at the right time.

ABB Ability™ Energy and Asset Manager also provides access on a multi-site level, allowing you to monitor and compare the performance of different facilities at the same time.

It allows profiling of users according to the level of access they require.

In addition, upgrades and changes can be organized at any time via the ABB Ability Marketplace™. With just a click, you can customize your solution according to your needs anytime, anywhere.

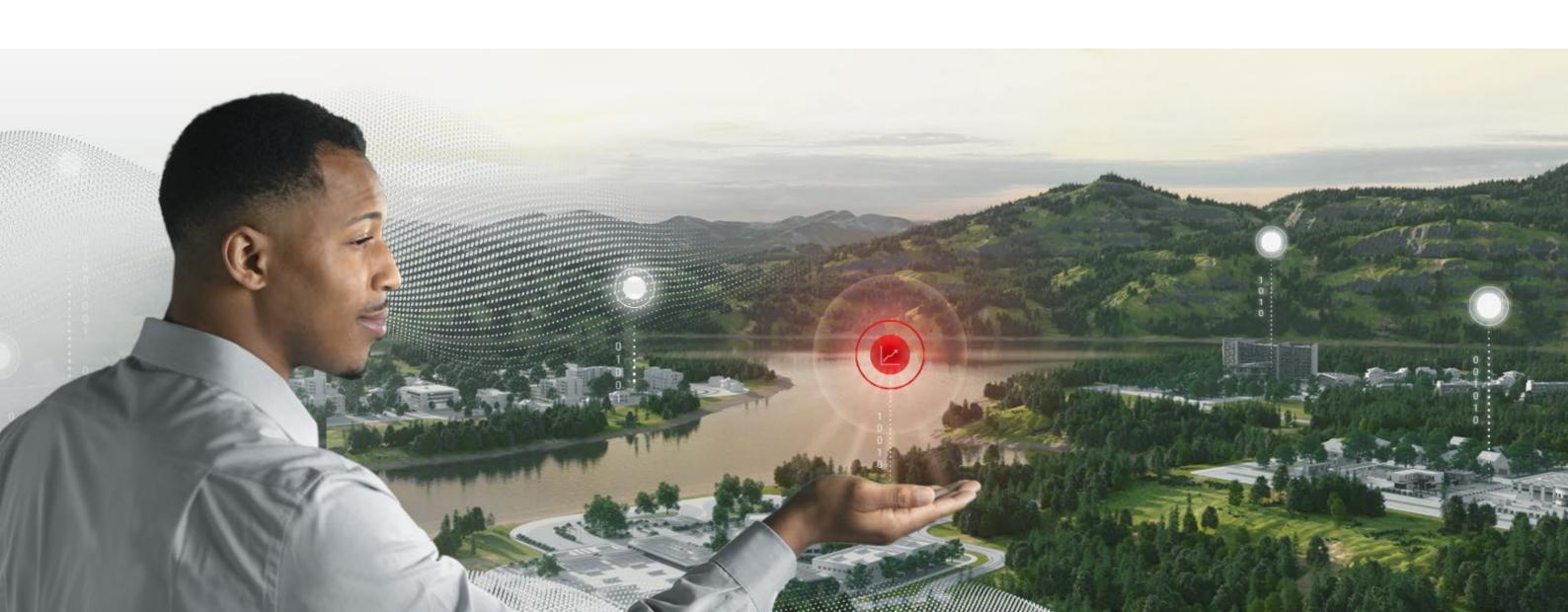


ABB Ability™ Energy Manager

Empowering your energy management with data

Added value from design to operations

As well as coming in a combined bundle, ABB Ability™ Energy Manager is also available separately.

ABB Ability™ Energy Manager adds value to your facilities and sites by providing clear information about consumption that makes cutting waste and improving energy efficiency simple. Facilities also benefit from lower energy bills and reductions in unplanned downtime. And it's scalable, from a single site to a multi-facility system.

Reduce carbon footprint Make more informed strategic decisions Integrate renewable energy sources

Operate as a resilient,

autonomous microgrid

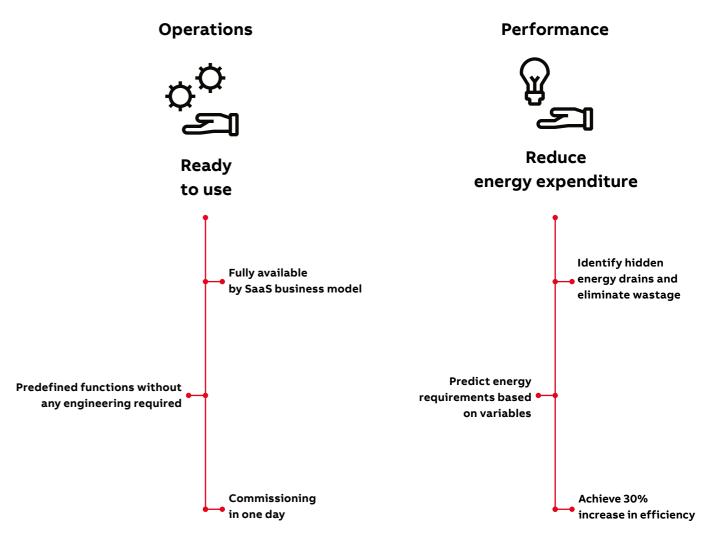


ABB ABILITY ENERGY AND ASSET MANAGER UNDERSTANDING POWER AND ASSETS

ABB ABILITY™ ENERGY MANAGER

ABB Ability™ Energy Manager

A smart interface

Every facility has different energy needs and targets, which is why the ABB Ability™ Energy Manager uses configurable widgets to meet the needs of your organization. And you can define, compare and access relevant results with maximized efficiency.



Energy functionality

Show a group's energy consumption across a select period and compare different groups' energy consumption across multiple sites



Group peak monitoring

Ensure your site does not exceed contracted power with a total active power aggregate



Energy Performance Index (EnPI)

Track specific performance trends by configuring the parameters, group, operation (Energy or Cost) and time period



Power factor

Monitor the power factor of every available asset within a defined period



Performance indicators

View your EnPi's aggregated value, based on the data inserted using Performance Parameter API



Reporting

Get scheduled reports with relevant site information. Fully customizable to your needs, receive reports by device group and time, with the ability to compare your data



Power quality

Access real-time data on parameters associated with each asset



Alerts

Automate your alerts and receive immediate feedback on the status of your site via email or SMS

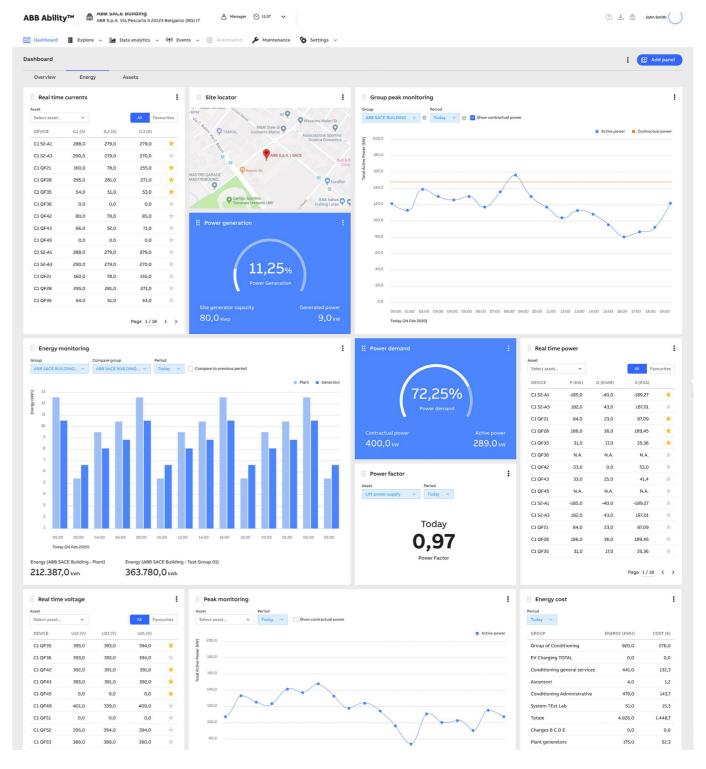


ABB Ability™ Energy Manager

ABB Ability™ Energy Manager

A world of applications

ABB Ability™ Energy Manager is an innovative cloud-based energy management tool that gives you the power to monitor, analyze, control and optimize your electrical system reaching energy efficiency and sustainability goals.

It helps you to reduce energy costs, improve your energy efficiency and manage your carbon footprint, with high flexibility of application.



Multi-site

Handle multiple buildings and plants, monitor and analyze their consumptions through comprehensive benchmarking. ABB Ability™ Energy Manager allows you to have a complete picture and focus on the sites that require more attention

Industrial and Manufacturing companies

Comprehensively monitor energy consumption of each installation, enhance you energy efficiency and facilitate auditing processes with our digital solution. ABB Ability™ Energy Manager means you can track all your energy consumption, right down to your lines and services, supporting the identification of wastes, computation of KPI and the development of energy efficiency cycles

Critical power and public facilities

Safeguard power distribution and ensure uptime with a reliable and energy-efficient solution.
Fully adaptable and innovative, Ability™ Energy Manager helps you with variety of widgets for continuous monitoring on several data which also includes power quality, real time alerts and supports for better utilization of power

Buildina

Cost savings, improved productivity, environmental compliance, and others are key reasons why organizations are now measuring its environmental performance. ABB Ability™ Energy Manager supports you to monitor energy and other environmental data such as temperature, water or gas with variety of widgets and preconfigured reports

multiple sites

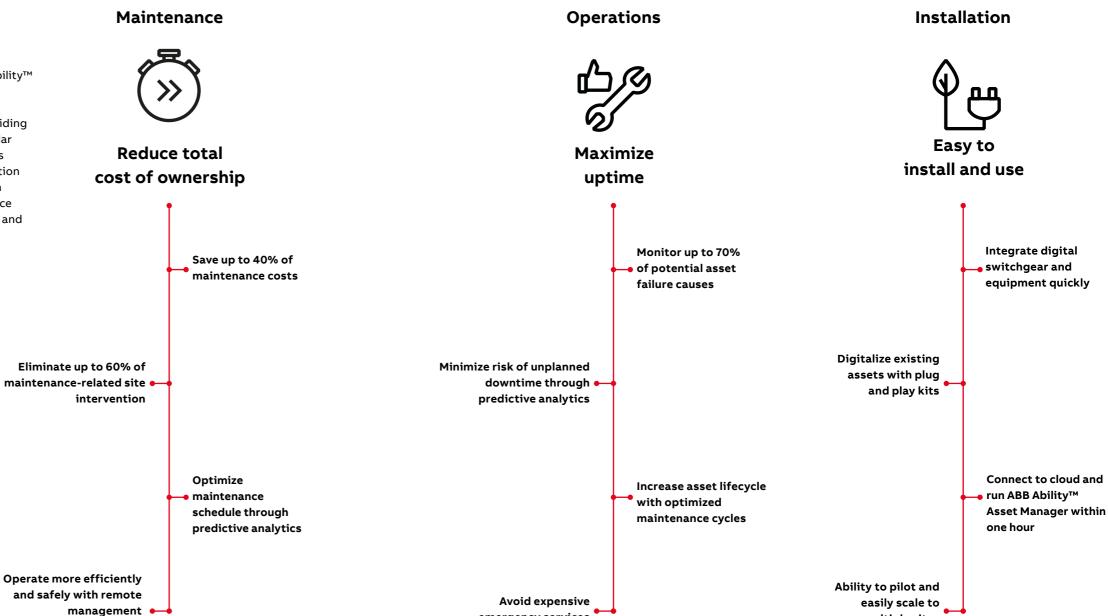
ABB Ability™ Asset Manager

Empowering your asset management with data

Added value from installation to operation and maintenance

As well as coming in a combined bundle, ABB Ability™ Asset Manager is also available separately.

ABB Ability™ Asset Manager adds value by providing analysis of field device data that delivers granular visibility of your asset behavior in real time. This solution detects potential faults through condition assessment, performance trends and pre-alarm notifications and enables predictive maintenance that significantly reduces unplanned downtime and operational costs.



emergency services

ABB ABILITY ENERGY AND ASSET MANAGER UNDERSTANDING POWER AND ASSETS

ABB ABILITY™ ASSET MANAGER

ABB Ability™ Asset Manager

A smart interface

Every facility sets different asset performance targets, and that's why the ABB Ability™ Asset Manager widgets can be customized for the specific needs of your business. And you can define, compare and access the most relevant results with maximized efficiency.



Condition monitoring

Granular visibility of your asset behavior in real-time for both LV and MV environments



Digital twin

Access asset data, documentation, historical data and more



Maintenance planning

Root-cause analysis of asset condition enables predictive maintenance



Events and notification

Set up alerts and notify key personnel remotely when an action needs to be taken



Health analysis

Get the full picture of your connected assets' health with clear categorizations for appropriate action, from "Very poor" (mostly failed, urgent action required) to "Very good" (as new, no action)



Reporting

Access a wide range of reports to gain a better understanding of how your assets are performing and identify any key trends

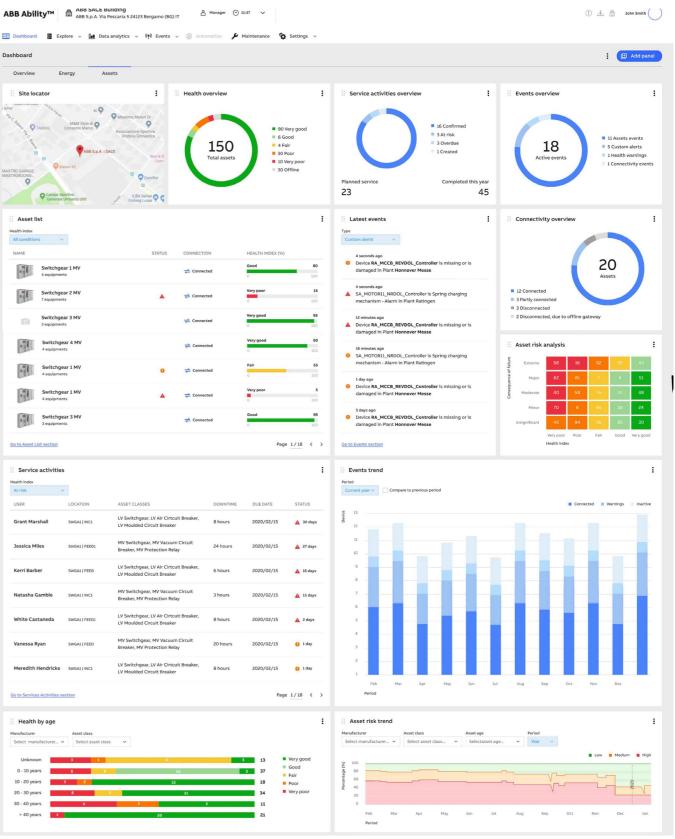


ABB Ability™ Asset Manager

ABB Ability™ Asset Manager

A world of applications

ABB Ability™ Asset Manager sets a new benchmark for simplicity and flexibility in asset performance management. It gives you the power of seeing and optimizing your site equipment behavior anytime, anywhere. From facilities to process industries, through to data centers and utilities.



Utilities

Asset critical industries like electricity and water utilities

- Increase transparency, resiliency and operational continuity
- Improve safety with remote health analysis
- · Optimize maintenance activities and asset lifecycle
- Reduce total cost of ownership

Process

Asset intensive industries like mining, oil, gas and chemical plants

- Identify and remediate equipment issues
- · Avoid productivity loss and reduce maintenance costs
- Ensure the highest level of power reliability
- · Maximize uptime, safety, speed and yield

Manufacturing

Industrial plants like food & beverage and automotive

- Improve equipment performance
- Ensure maximum product quality and consistency
- · Lower costs and emissions
- Prevent costly downtime and product wastage

Data centers

Critical power systems, like in data centers and hospitals

- Ensure reliable power supply and continuous efficiency
- · Detect any anomaly to optimize your assets
- Ensure maximum uptime

Buildings

Mid-large commercial buildings like hotels, malls and offices

- Remotely view, manage, and optimize building systems
- Implement predictive (condition-based) maintenance
- Ensure reliability and availability of power and equipment

Architecture

Truly plug-and-play

A new benchmark in simplicity and performance.

ABB Ability™ Energy and Asset Manager enables the collection of relevant information from ABB devices installed in the low- and medium-voltage power distribution system.

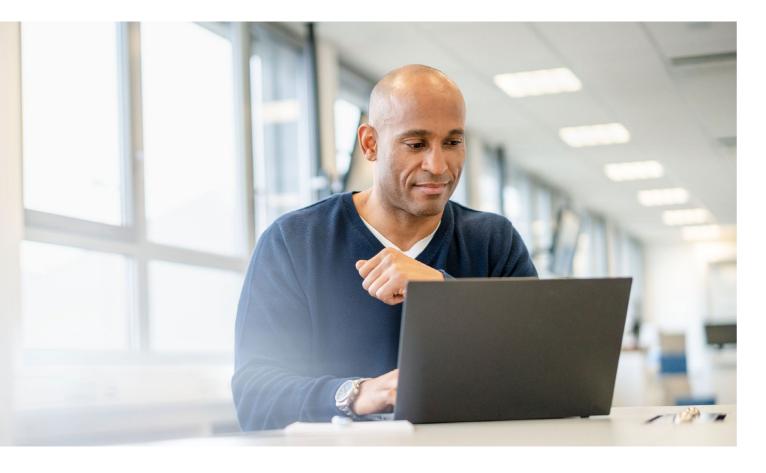
These devices can be connected to your platform to share data with products (equipped with Ekip Com Hub) or with ABB Ability™ Edge Industrial Gateway via Modbus RS-485 and Modbus TCP/IP.

To find out what information you can unlock from your existing digital devices when you connect them to ABB Ability™, take a look here.

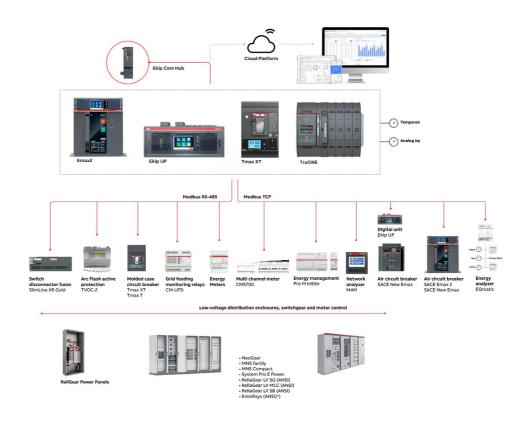
The ABB Ability™ Edge Industrial Gateway

can be mounted on DIN rail to collect data throughout the system. You can also connect sensors to measure environmental parameters (temperature, water, gas) via both analog and digital I/O. ABB Ability™ Edge Industrial gateway has enhanced connectivity functionalities, providing Wi-Fi or 3G/4G connectivity.

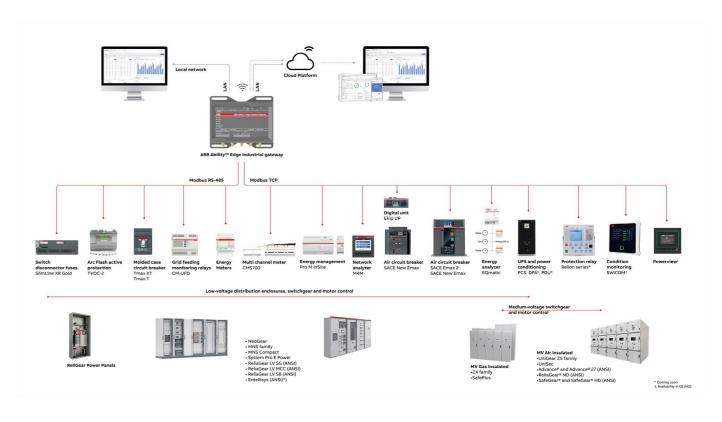
Other options are available and you can find out more here.



Architecture layout with Ekip Com Hub



Architecture layout with ABB Ability™ Edge Industrial Gateway



Ease of use

The power of understanding at your fingertips

ABB Ability™ Energy and Asset Manager's ease of use sets a benchmark, thanks to its integrated and plug-and-play architecture.

ABB Ability™ Energy and Asset Manager does not require engineering or special support for commissioning, helping you avoid the cost and time-consuming setup of an energy and asset management system involving many components.

The solution simply involves mounting an Ability™ Edge Industrial Gateway module on a DIN rail. The commissioning tool will then set up the system and enable ABB Ability™ Energy and Asset Manager in just a few steps.

Once the connection is set up, you can extend access to the platform to other users such as partners and staff with just a few clicks.

Each user can be entrusted with tasks and authorizations according to their role within a specific site.

ABB Ability™ Energy and Asset Manager features an intuitive and compelling graphic interface that guides the user through their job, presenting all the relevant information, derived from thousands of field parameters. The interface can be accessed easily and securely using smart devices or a desktop PC from anywhere on site or elsewhere.

All operations run on the ABB Ability™ Energy and Asset Manager platform are simple, expediting the task of delivering the maximum result.

Start Ekip Connect 3.0 wizard or cloud commissioning tool

