# SENTRON Powermanager

## The power monitoring software for smart infrastructures

siemens.com/sentron-powermanager



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New

# SENTRON Powermanager
What's new in V8

## Operation in the browser with HTML5 based Flex client

### User defined Dashboards with free configurable widgets on each level

- Value card
- Trend
- Gauge
- Consumption chart
- Table

### Execute Reports

### Operate Graphics

## Virtual Devices

### Inheritance for imported devices

Adapt default device settings on system / area level




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# SENTRON Powermanager

1. Introduction

2. Applications and references

3. Highlights at a glance

4. Features

5. Ordering information – system packages


6. Ordering information – license concept

7. System requirements

8. Up-to-date with SUS/SUR

9. Migration from classic V3.6 to SENTRON Powermanager

10. Getting started with the software




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# SENTRON Powermanager
# Introduction



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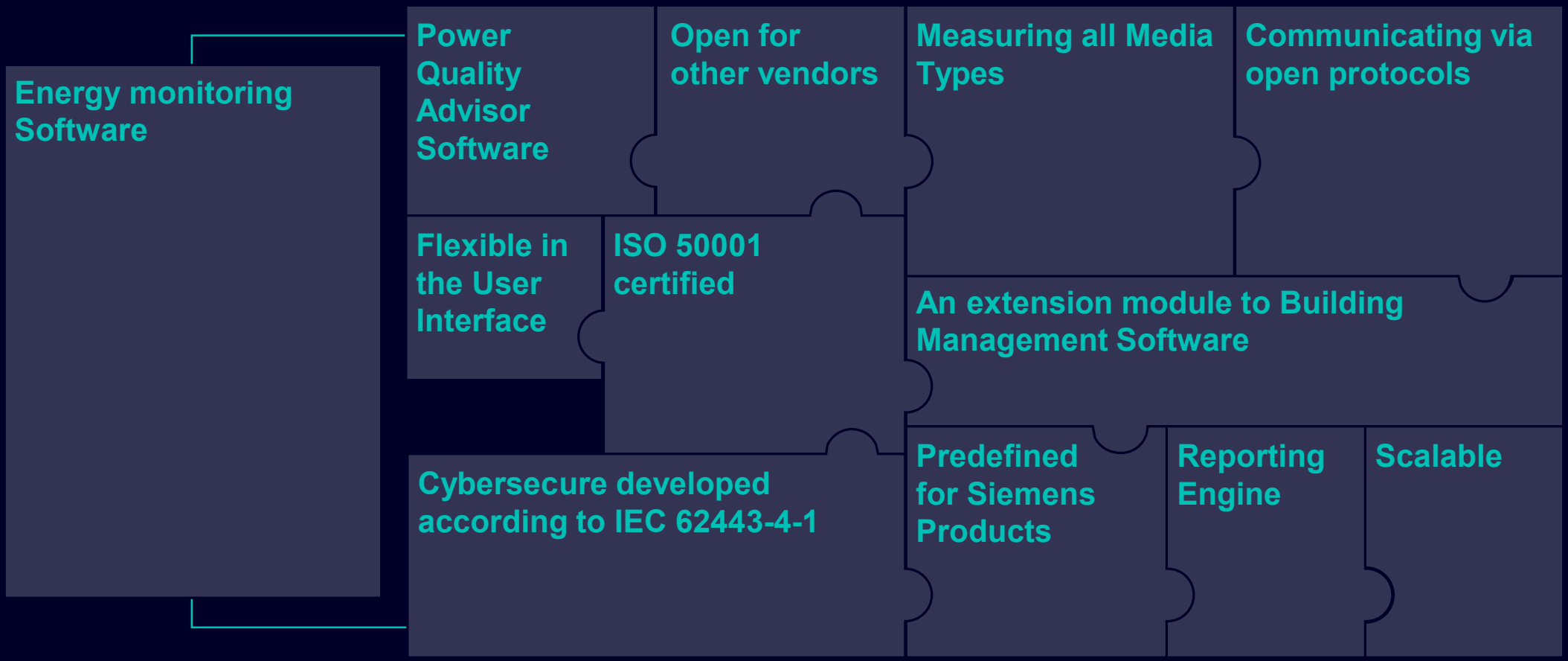
**SENTRON Powermanager**
First Look

**For a brief insight into the software just click here**

# SENTRON Powermanager
What is Powermanager?



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# SENTRON Powermanager
# Application and references

# SENTRON Powermanager
One software product, many applications

**Buildings**
e.g. hotel chains, shopping malls, research facilities: energy monitoring irrespective of location or over several locations via standard IT networks, cost-center-specific billing

**Industrial plants**
e.g. large bakeries, automotive industry, furniture industry: fast identification of existing and avoidance of future load peaks through trend analyses

**Infrastructure**
e.g. data centers, logistics centers, hospitals: avoidance of system failures and critical states in the power supply



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# SENTRON Powermanager
## Selected references


### Energy monitoring in a project for sustainable use of energy

Fraunhofer Institute for Integrated Systems and Device Technology IISB
Germany, Erlangen

Click

### Energy optimization for sustainable security of supply – Energy efficiency project in the healthcare sector

St. Joseph Hospital
Germany, Berlin


### Energy monitoring in logistics centers and as a solution for logistics customers

Rexel Germany
Maisach




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# SENTRON Powermanager Examples

# Holistic energy management considering all different media types

## Use Case scenario

When implementing an energy management solution it is necessary to integrate and analyze different types of energy media like water, air, gas, steam, electrical. Therefore, a corporate energy manager or a sustainability manager needs to have a clear picture about all those consumers.

## Challenge

- Ability to integrate different kinds of counter, meter, etc. With different communication protocols into one leading energy management system
- Independent of the type of media the energy management software needs to be able to operate with different units and to visualize and analyse different medias and different unit in a meaningful manner
- For final reportings on total consumption or average total consumption p.a. like it is for example mandatory in most countries by law (e.g. Energy Efficiency Directive in Germany) all different medias and the repsective units are standardized by calculation to kWh.

## Energy management is not limited to electricity




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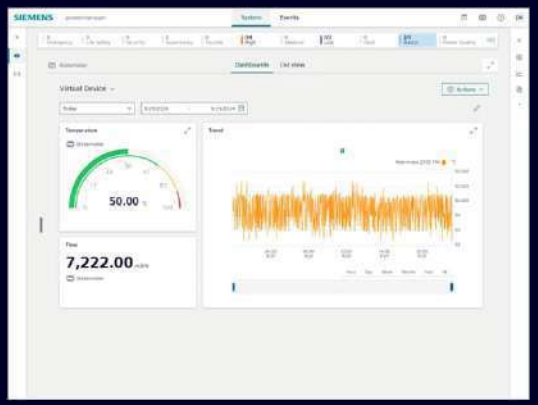
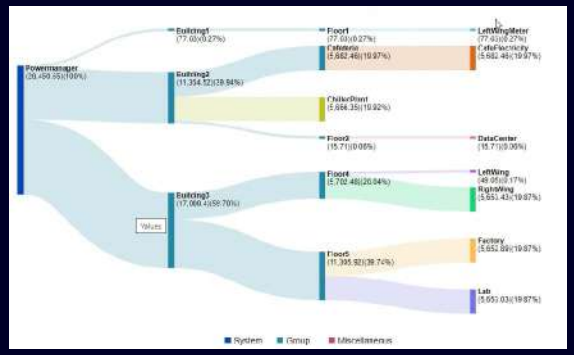
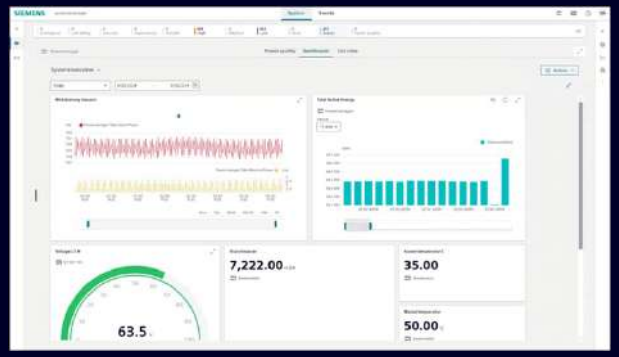
# Solution




## Solution

**SENTRON Powermanager enables you to visualize, archive, analyze and report all relevant types of energy media**

### Key Features

- SENTRON Powermanager enables user to integrate every necessary counter etc. to integrate all types of energy
- SENTRON Powermanager is able to visualize, analyze and report different media and units
- With SENTRON Powermanager a user can create preconfigured reports like the cost center report. This report type recognizes different media used and structures itself accordingly.

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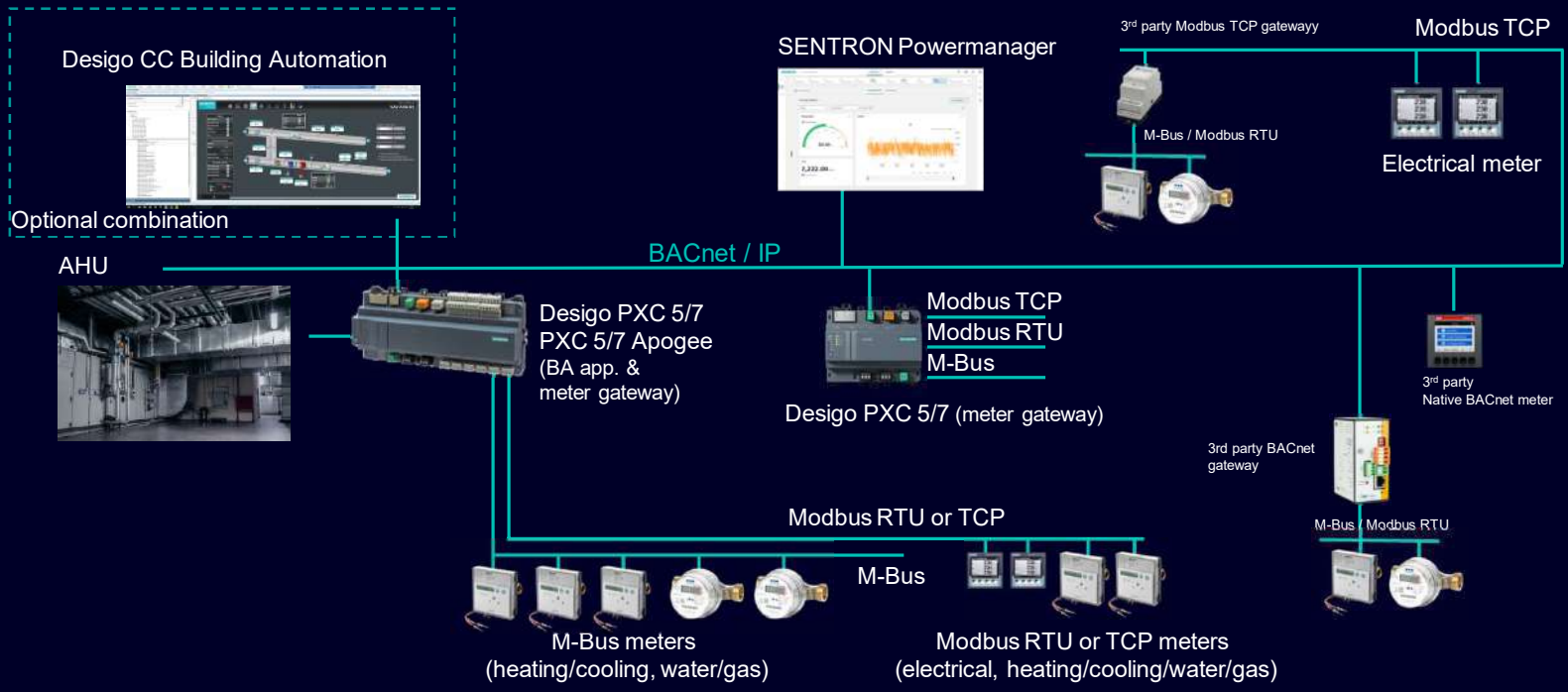
# Integration of different kind of meters for different kind of energy media into the leading system SENTRON Powermanager

## Key Features

- Any counters and meters for air, gas, water, electricity etc. Connect to SENTRON Powermanager via Modbus TCP, RTU, BACnet, impulse
- SENTRON Powermanager enables to operate with all relevant data for a comprehensive energy management considering consumption across different media
- SENTRON Powermanager enables standard reporting including all types of energy media







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# **Relationships** (Powermanager consists of dashboards and reports to monitor power usage and energy consumption)

## Meter instances

Electrical meter 1 of type PAC4200
B_01`Flr_001`**Mtr`PAC4200(1)`PwrAct(Tot)**
B_01`Flr_001`**Mtr`PAC4200(1)`AcpwPh1**
B_01`Flr_001`**Mtr`PAC4200(1)`AcpwPh2**
…

Electrical meter 2 of type PAC4200
B_01`Flr_001`**Mtr`PAC4200(2)`PwrAct(Tot)**
B_01`Flr_001`**Mtr`PAC4200(2)`AcpwPh1**
B_01`Flr_001`**Mtr`PAC4200(2)`AcpwPh2**
…

Heat meter 1 of type UH50
B_01`Flr_001`Room1 **Mtr`UH50(1)`HeatingEnergy**
B_01`Flr_001`Room1 **Mtr`UH50(2)`WaterVolume**
…

## Meter type

Type 1: PAC4200

| Property Name | Description |
|---|---|
| ActiveTotPower | Total Active Power |
| ActivePowerPh1 | Active Power Phase 1 |

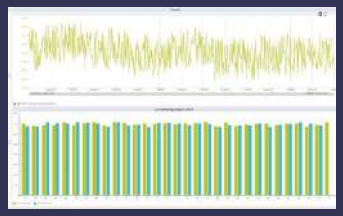
Type 2: UH50

| Property Name | Description |
|---|---|
| HeatEnergy | Heating Energy |
| WaterFlowVol | Water Flow volume |

## Pm Dashboard

Gauge 1
Gauge 2
Gauge 3

Trend 1
Bar chart



## Pm Reports

## Pm Structure

- Area
  - Sector
    - Sector

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# For showcasing energy management and sustainability activities in your entry hall or showroom: Kiosk mode with SENTRON Powermanager

## Use Case scenario

Consumption values and certain KPIs or calculations like CO2 emissions, equivalents or energy used per produced piece or per m² in the building etc. shall be visualized on a prominent screen in the factory, the building, entry halls, floors, etc.

This highlights the efforts on sustainability taken but also engages employees to actively help in reducing unnecessary energy consumption.

## Challenge

- Screens and dashboards show multiple relevant values, information and KPIs for the user
- UI is build to be used from an energy manager or operation manager but it is also necessary to showcase dashboards and certain information at other points
- System needs to be able to run and be operated and still offer a defined visualization at some points in the company like a big screen in the entry hall

**Energy management KPIs can be shown anywhere in KIOSK mode**




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# Highlight your efforts and achievements in terms of showcasing saved energy, CO2 etc. to employees and visitors in your entry hall


## Solution

**SENTRON Powermanager enables you to visualize defined dashboards even in a slide show at certain points like entry halls etc. while the system is still fully running and operated in your control room**

### Key Features

- SENTRON Powermanager enables user to log in with different accounts and roles
- One can define and create certain dashboards highlighting the individual KPIs, graphics, calculations etc.
- SENTRON Powermanager offers the option to showcase these dashboards in KIOSK mode at any place in the company while the system is operated independently




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# Shopfloor visualization and operations with SENTRON Powermanager and SIMATIC HMIs

## Use Case scenario

Within a company there are different user groups. A corporate energy manager is probably working in his office operating SENTRON Powermanager on his PC, while a service engineer, field technician etc. wants to get information directly at the switchboard visualized on an HMI

## Challenge

- Information on consumption but also on status, condition etc. of critical switching and protection devices are to be visualized in different areas and for different user groups within one entitiy
- Energy Monitoring solutions need to be able to accessed on various types of devices

## Energy management accessible from anywhere




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# Solution: user login as shopfloor client to SENTRON Powermanager via SIMATIC HMI


## Solution

**SENTRON Powermanager enables you to define different views for different users e.g. run on any display**

### Key Features

- SENTRON Powermanager runs on a server
- Login via browser on HMI (or any other display able to run a web browser) to flex client of SENTRON Powermanager
- In SENTRON Powermanager special user groups can be defined that have a certain view on specific dashboards
- User specific views and operating rights from one server to different clients regardless where they run
- With SENTRON Powermanager a user can create preconfigured reports like the cost center report. This report type recognizes different media used and structures itself accordingly.




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# SENTRON Powermanager
# Highlights at a glance

# SENTRON Powermanager
## Highlights at a glance

**Maximum safety and security**
- Fail-safety
- Investment protection
- Data security

**Identifying potential**
- Insight into device data
- Condition-based maintenance


**Complete overview**
- Collection, analysis and visualization
- Ready-made, customizable dashboards
- Continuous monitoring

**Corporate energy management**
- Extensive basic functionalities
- Preparation and export of data
- ISO 50001 compliant



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# SENTRON Powermanager
## Highlights

### Maximum safety and security

- Fail-safety through Condition Monitoring
- Alarm notification (SMS, email) for better event handling
- Investment protection for existing equipment:
  - Simple connection of all SENTRON devices and any Modbus devices (including 3rd party)
- Communication through an IP address:
  - Simplified commissioning, running operation and security settings
- Increased data security
  - Prevents crashes when Windows is shut down without stopping the expansion module or an irregular runtime stop (Desigo CC system does not interrupt recording but shuts down safely)





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# SENTRON Powermanager
Highlights

## Identifying potential for optimization

- Targeted insight into important characteristic values of the plant
  - Electrical parameters (current, voltage …)
  - Status information (energy and power values)
- Condition-based maintenance
  - Which device must be replaced/repaired when?





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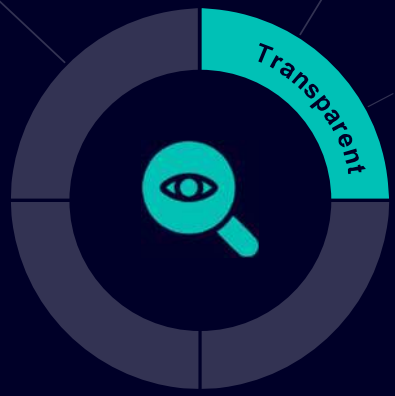
# SENTRON Powermanager
## Highlights

### Complete overview

- Collects and stores energy data of all communication-capable devices
- Supports up to 700 devices
- Ready-made, customizable dashboards for analysis
- Evaluation of load peaks and power curves (energy cost savings)
- Continuous monitoring for early detection of critical plant conditions
- High system availability
- Simple process for adding additional languages
- Powerful user management: management and tracking of user accesses, rights and actions thanks to the user, access and view configuration







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# SENTRON Powermanager
## Highlights

### Corporate energy management

- Extensive basic functionalities
- Preparation and export of data
- Energy monitoring according to ISO 50001 (incl. certificate of conformity)
- Integrated long-term archive
  - Storage of the most important measurement values
  - Data evaluation over extended periods
  - Direct derivation of measures for cost-cutting
  - Fast fault localization
- Predefined reports and messages
- Illustration of the company's own indicators





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# SENTRON Powermanager
# Extended reporting and charting




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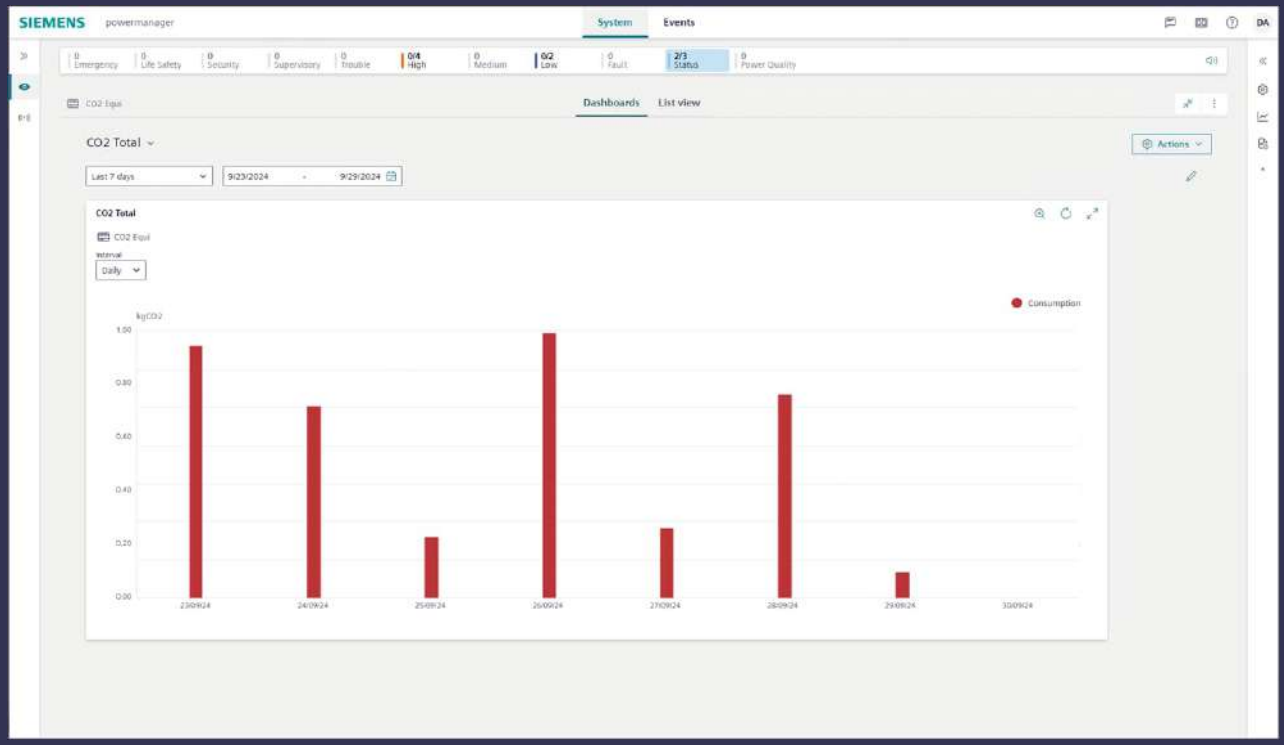
# SENTRON Powermanager
Extended reporting and charting

## Dashboard: CO2 Emission

- Identify and compare $CO_2$ emission for whole site or each measuring point
- Manual configuration of $CO_2$ emission calculation based on energy mix factors
- Hourly, Daily, Weekly, Monthly, Yearly overviews



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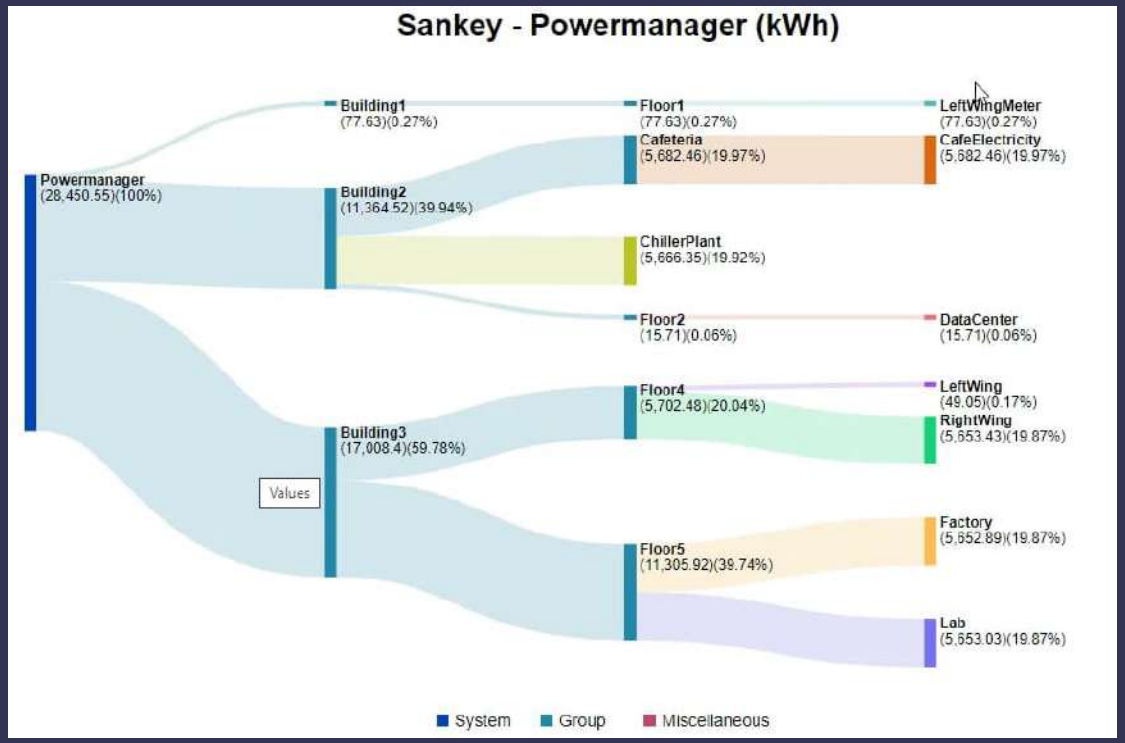
# SENTRON Powermanager
## Extended reporting and charting

### Report: Sankey diagram

- Power distribution in the building visible at a glance
- Integrated automatic report
- Available at any time in the email inbox







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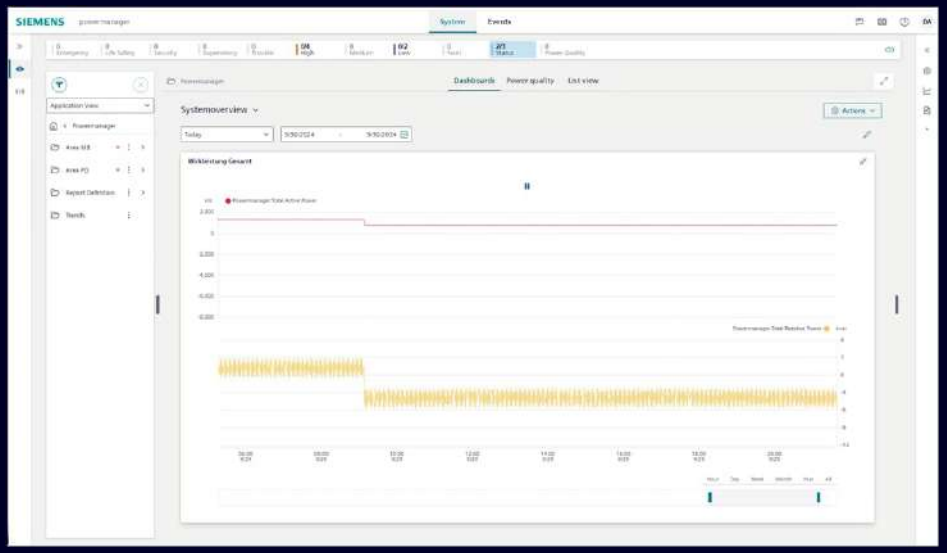
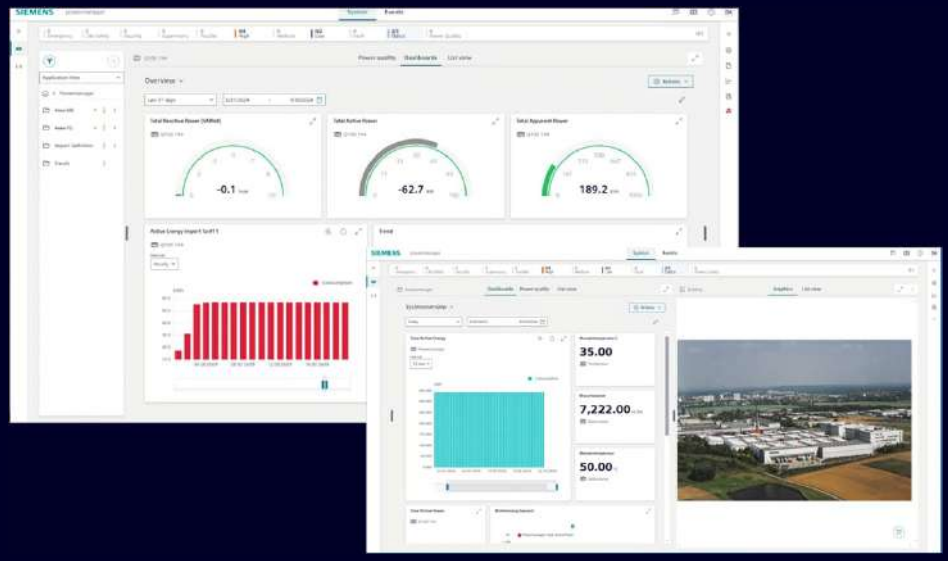
# SENTRON Powermanager
Extended reporting and charting

## Charts: System, Area/Sector Overview Health, Energy & Power




System or area overview:
Overview of the entire location

All relevant loads from electrical and other medias in the entire building at a glance

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# SENTRON Powermanager
## Extended reporting and charting

**Charts:**
**System, Area/Sector Overview Health, Energy & Power**

System/area-wide breaker health dashboard:

- Health of the installation always in view
- Avoidance of plant shutdowns and failures
- Maintenance is preventive and plannable

**SENTRON Powermanager: the energy management software for Smart Infrastructure.**




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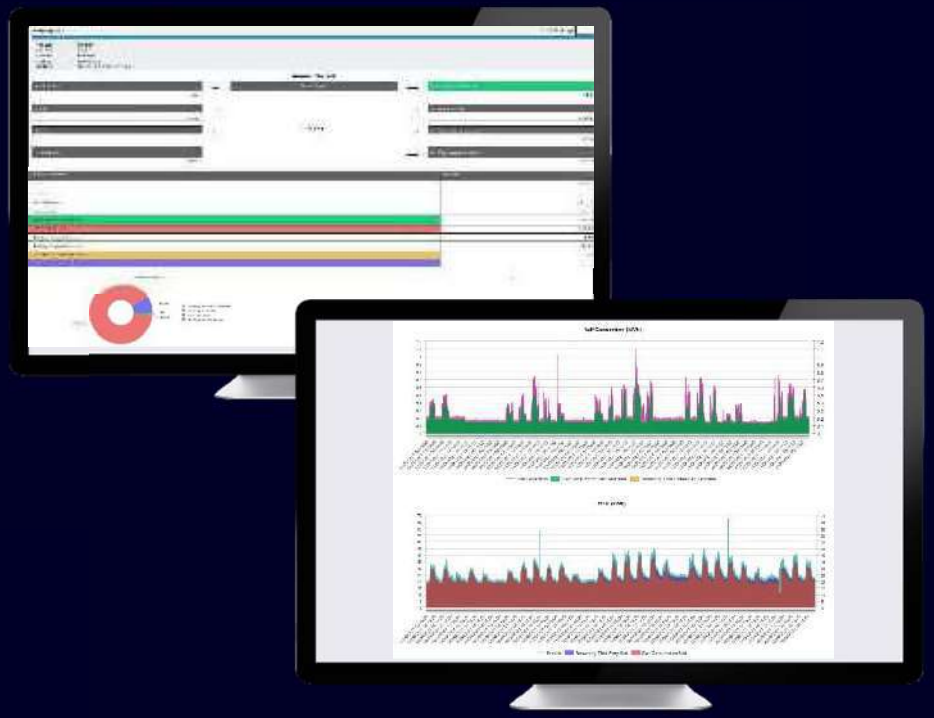
# SENTRON Powermanager
Extended reporting and charting

## Report: Delimitation of third-party quantities



**On the safe side with 7KM PAC2200 CLP measuring devices and integrated report for delimitation of third-party quantities**

### Ensuring EEG levy privileges

As of January 1, 2022, anyone benefiting from EEG levy privileges with regard to the import or self-generation of electrical power must delimit third-party quantities in accordance with calibration law.
This also means that special requirements are placed on the measuring equipment.

### Delimitation of third-party quantities

Third-party supply is when a company provides another natural person or legal entity with electrical power for final consumption. This includes, for example, the current consumption in rented premises, construction site power or a canteen run by an external provider.
Leased devices, such automatic drink vending machines, printers/photocopiers or hired IT infrastructure are considered to be third-party loads.



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# SENTRON Powermanager
# Customizable user interface



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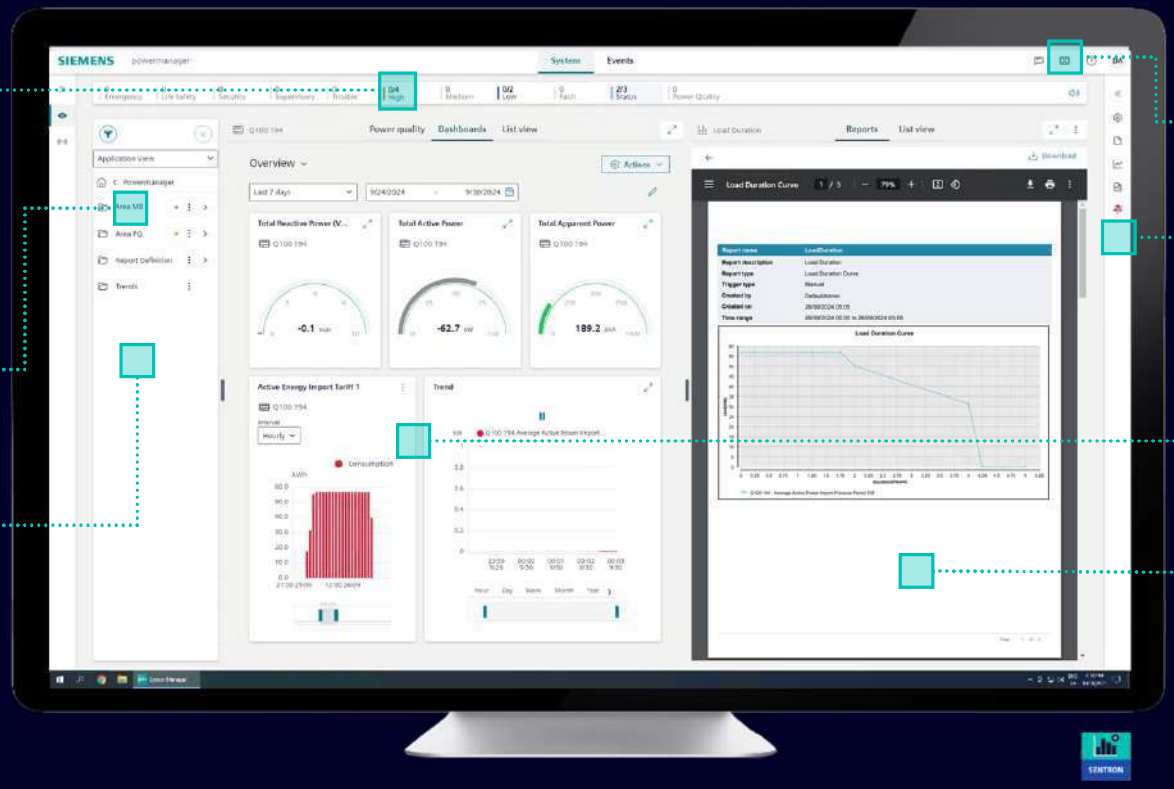
# SENTRON Powermanager
## Operation in Flex Client







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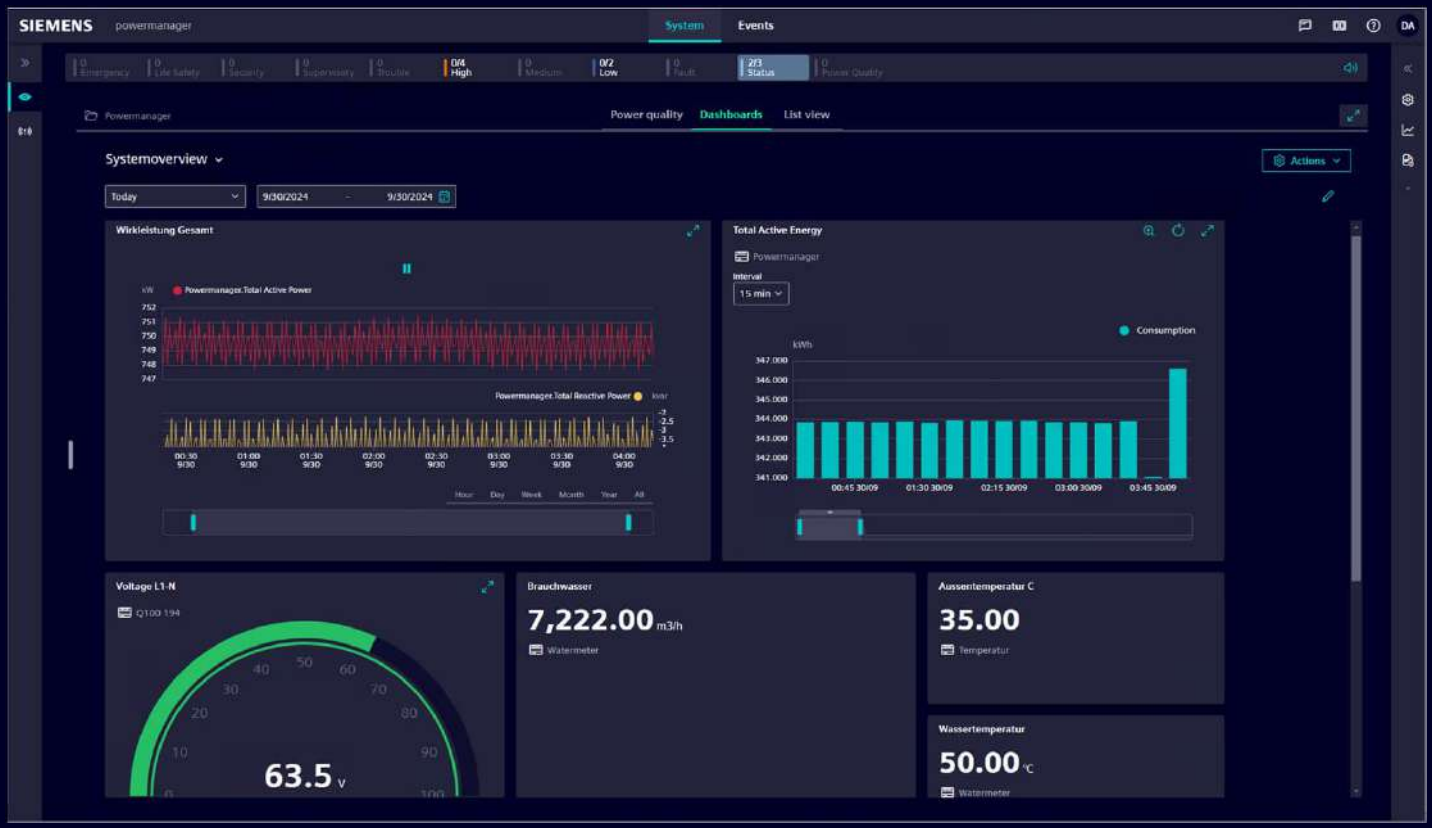
# SENTRON Powermanager
Bright and Dark Mode



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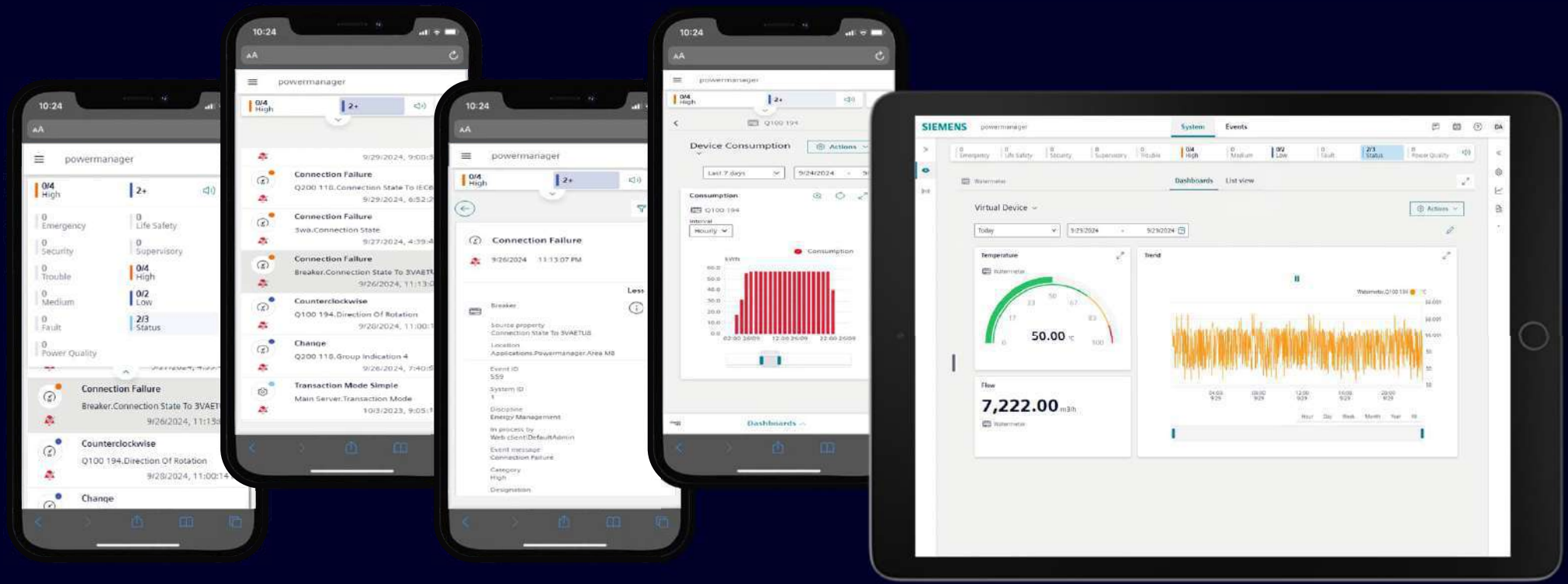
# SENTRON Powermanager
mobile Device support



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# SENTRON Powermanager
# Modified operating concept



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# SENTRON Powermanager
## Operating concept

**Clear views avoid operating errors and facilitate use**

### Separation of views

**Application view**
Configuring the building to be monitored

**Management view**
Powermanager platform and configuring views

**Operation and monitoring**

**Create and evaluate reports**

**Analyze data**

**Configure and create views**

**Manage users**




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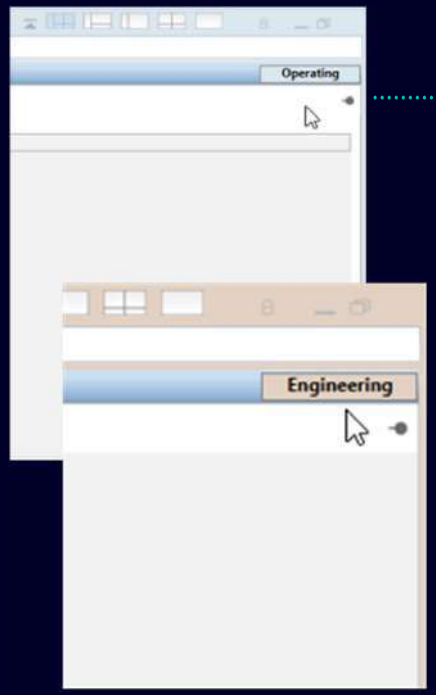
# SENTRON Powermanager
## Operating concept




**+ Clear roles avoid operating errors and facilitate use**

### Separation of user roles

**Operating**
Operator mode

Focus on the core elements in energy management

**Real-time monitoring**

**Create and evaluate reports**

**Engineering**
Configuration mode

Setting the device properties

**Create and modifydevices**

**Define plant structure**

**Configure graphics**
e.g. create single-line diagrams

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# SENTRON Powermanager
# Optimized workflows



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# SENTRON Powermanager
## Simple workflows

**1** **Only 2 steps:** Specify the device type…


**2** … and the IP address and you're done.


- Appropriate (and configurable) default settings can be made to minimize engineering work
- Drag-and-drop operations and filtering and sorting are possible




- **Engineering for a fraction of the costs and time with minimum training requirements**
- **Expansion of Desigo CC with further trades to simplify energy management**




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# SENTRON Powermanager
# Supported devices and reports



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# SENTRON Powermanager
## Supported devices and reports

### Supported devices SENTRON Powermanager & PQ Advisor

**Power meters**
- PAC1600
- PAC2200
- PAC2200CLP
- PAC3100
- PAC3120
- PAC3200
- PAC3220
- PAC3200T
- PAC4200
- PAC5100
- PAC5200

**BCM**
- PAC1200
- SEM3

**PQ recorder** New
(via IEC 61850)
- SICAM Q100
- SICAM Q200

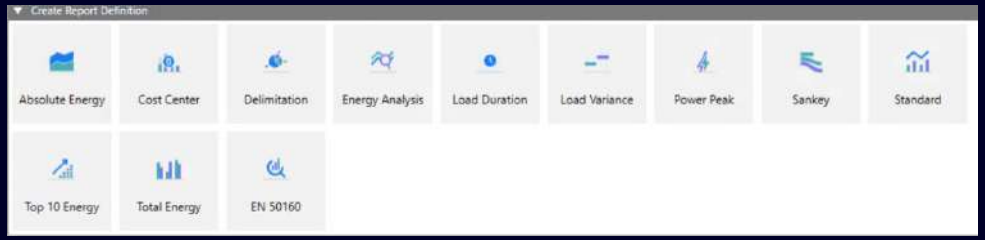
**Breakers**
- 3VA-ETU5/ETU8
- 3VA27
- 3WA
- 3WL
- 3WL10

**Powercenters**
- SENTRON Powercenter 1000
  - 5SL6 COM MCB
  - 5SV6 COM AFDD/MCB
  - 5ST3 COM AS/FC
  - 3NA COM LV HRC

**Others**
- Average value
- Calculated value
- Converter
- KPI
- Virtual counter
- Third-party devices
- Virtual Device

### Supported reports SENTRON Powermanager

- Absolute energy
- Cost center
- Energy analysis
- Load duration
- Delimitation of third-party quantities
- Sankey diagram
- Load variance
- Power peak
- Standard
- TOP10 energy
- Total energy
- EN 50160 (PQ Advisor required)



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# SENTRON Powermanager
# Optimized standard views of Siemens devices



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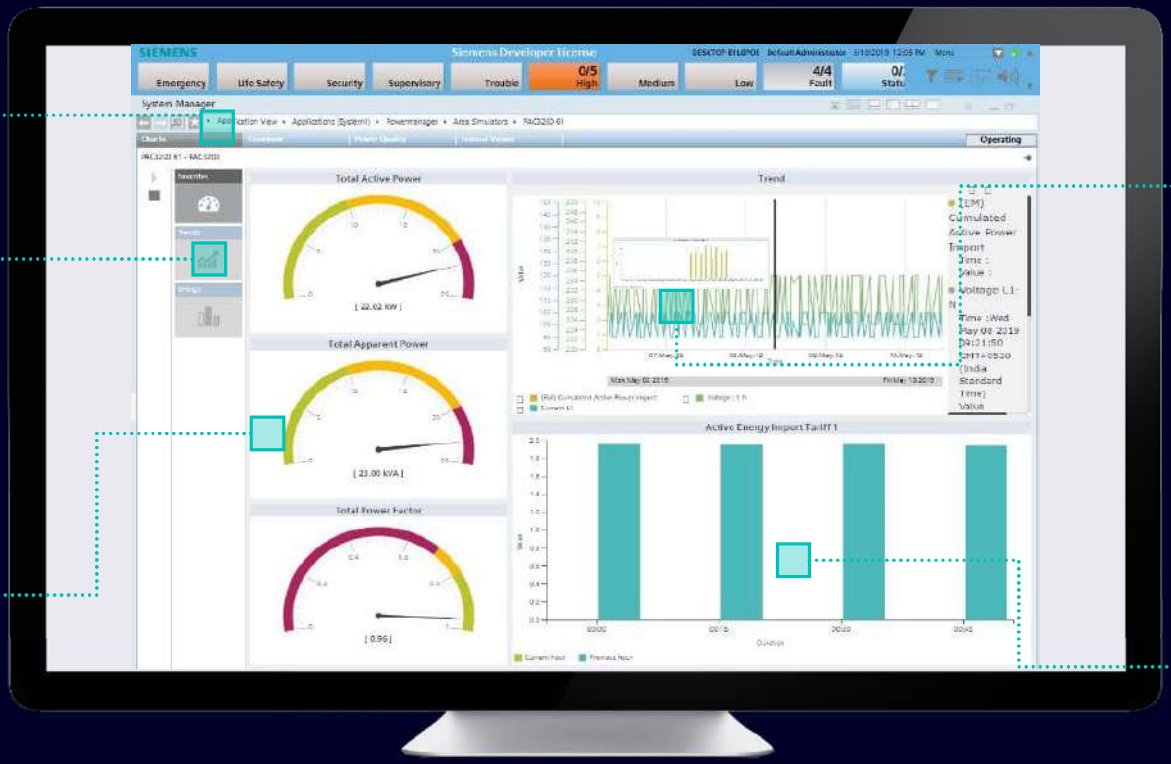
# SENTRON Powermanager
## Optimized standard views of Siemens devices

Standard device screen
- Tab cards
- Tiles




The display elements show the following:
- Total active power
- Total apparent power
- Total power factor

Line chart shows "Cumulated active power import in the current period" by default

Additional data points can be selected (in "engineering" mode)

Line chart shows "Active energy import tariff 1" by default and the comparison with the previous period, e.g. month

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# SENTRON Powermanager
## Optimized standard views of Siemens devices (1/7)

- By default, the line chart shows "Voltage", "Current", "Power", "Power Demand", "Power Factor" and "THD".
- The data points on the "Custom" tab are selectable data points in the charts and can be activated/deactivated at any time

- The bar chart shows the "Active energy import tariff 1" of the current period as compared with the previous period; in addition, other energy values can be selected
- The duration (hour, day, week, month, year) and interval (15 min., hour, day, week, month) can be selected
- The "Comparison" function can be deactivated
- The most important values are shown in a grid structure




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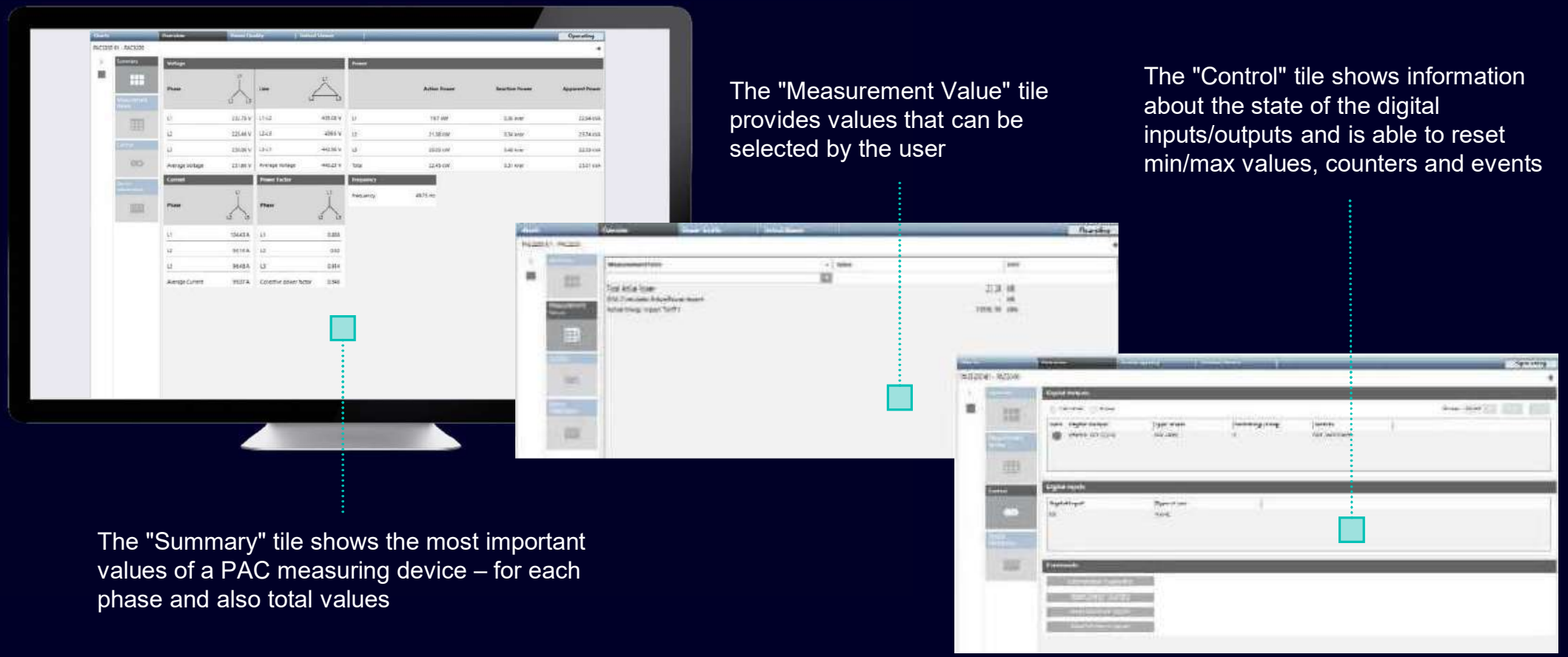
# SENTRON Powermanager
## Optimized standard views of Siemens devices (2/7)



The "Summary" tile shows the most important values of a PAC measuring device – for each phase and also total values

The "Measurement Value" tile provides values that can be selected by the user

The "Control" tile shows information about the state of the digital inputs/outputs and is able to reset min/max values, counters and events

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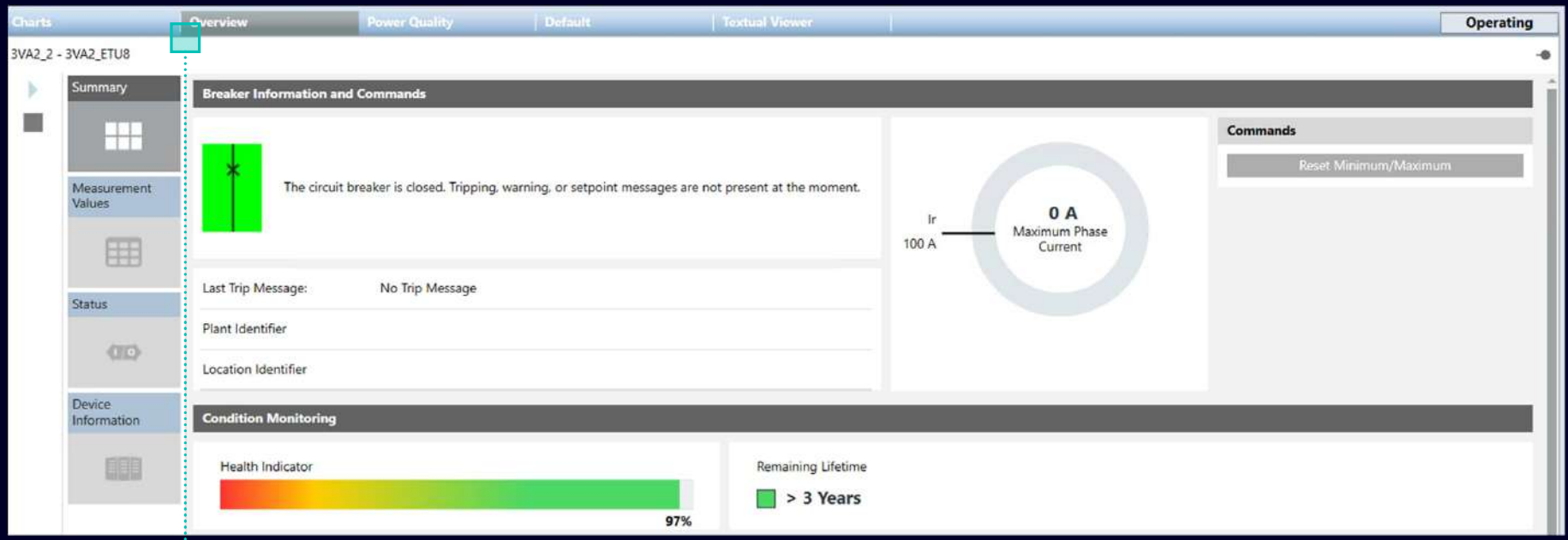
# SENTRON Powermanager
## Optimized standard views of Siemens devices (3/7)




- The "Overview" tile contains relevant information about the condition of the circuit breaker (Condition Monitoring)
- The "Health Indicator" and the "Remaining Lifetime " can be used to plan maintenance intervals better



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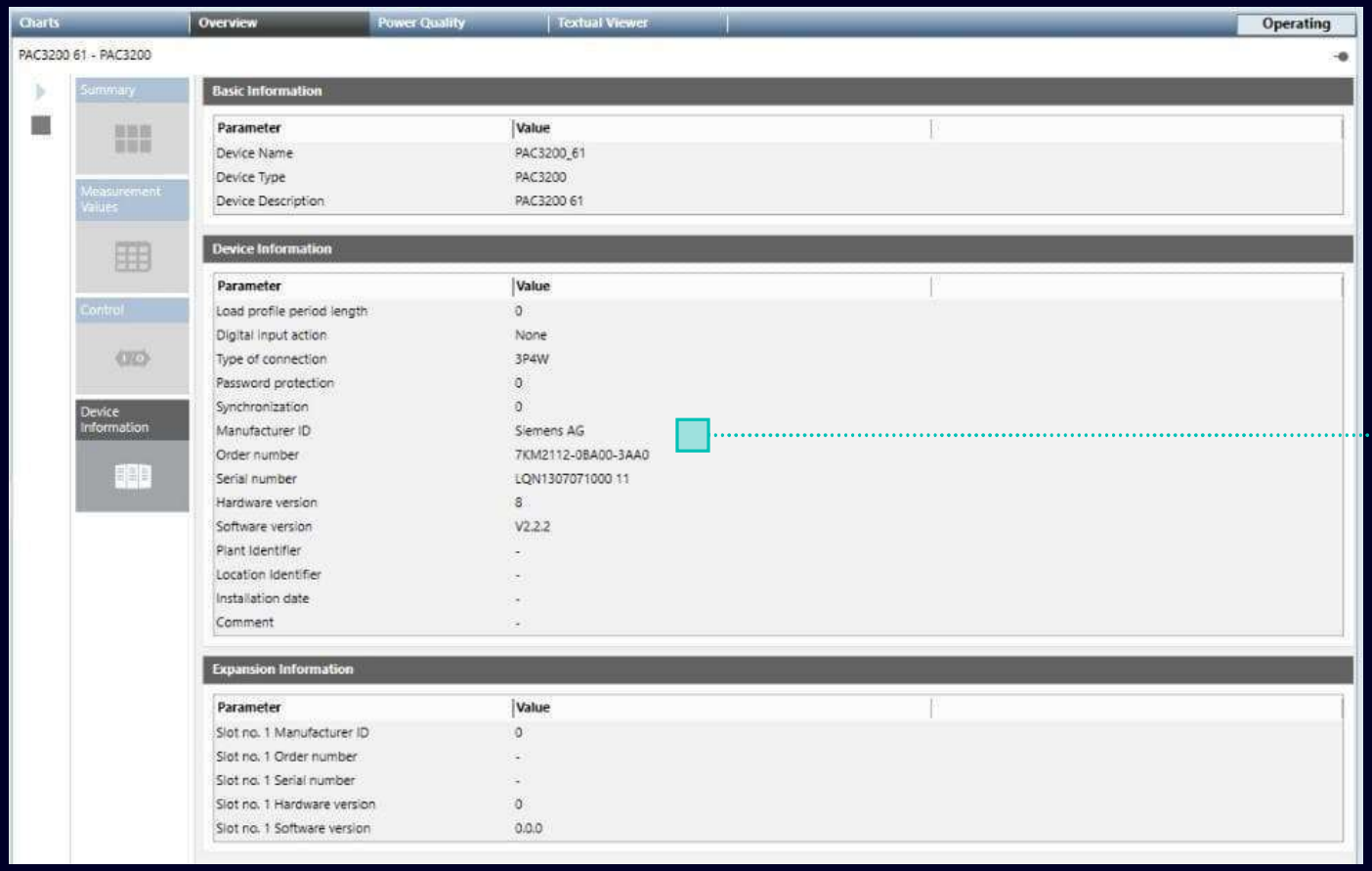
# SENTRON Powermanager
## Optimized standard views of Siemens devices (4/7)




- The "Device Information" tile provides "Basic Information" such as
  - Device name, type and description
- "Device Information" such as
  - Plant and location identifiers, order and serial number, hardware and software version …
- Also, "Expansion Information" about the modules in the module slot of the device



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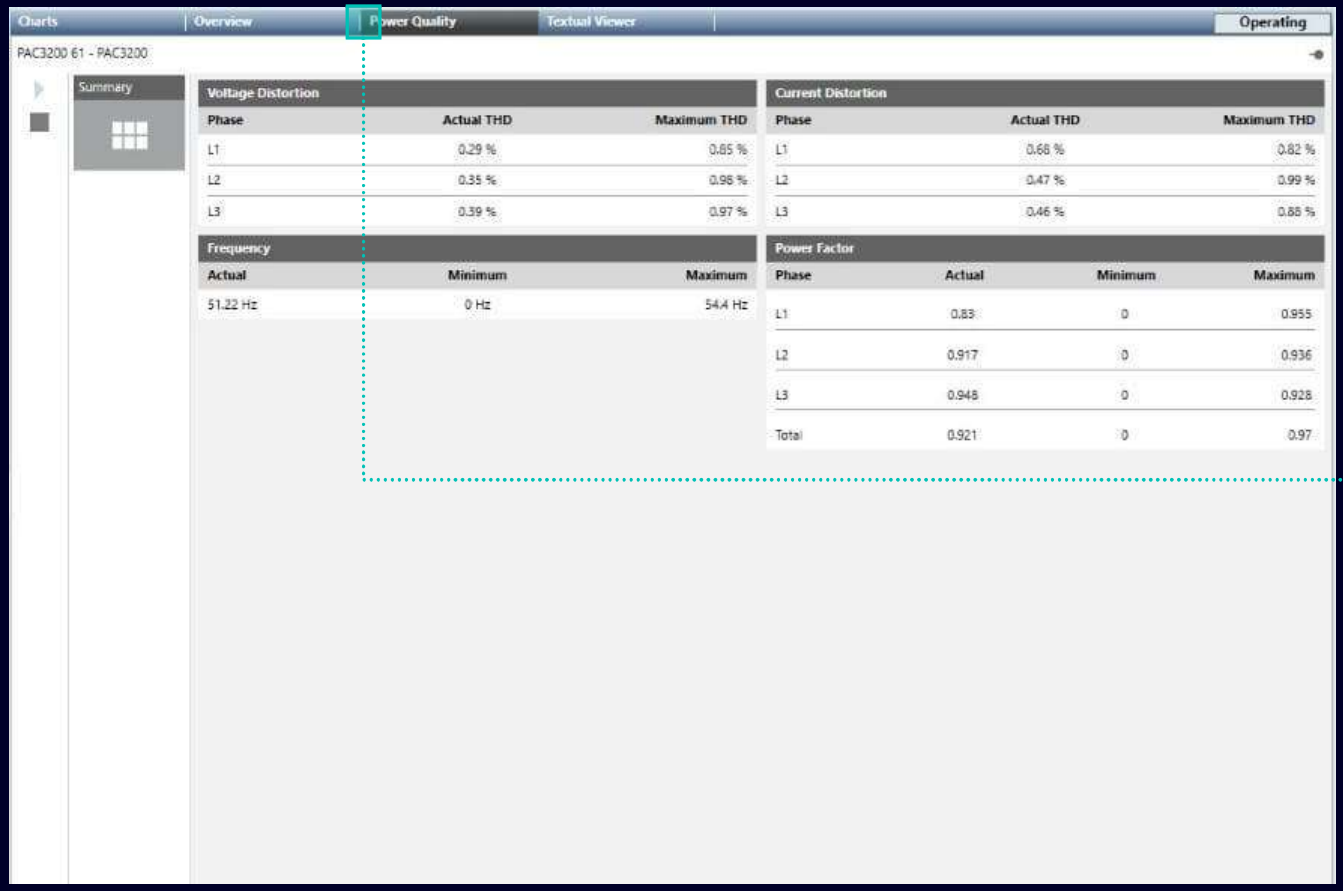
# SENTRON Powermanager
## Optimized standard views of Siemens devices (5/7)




- The "Power Quality" tab provides basic information on the "Summary" tile such as
  - "Voltage Distortion", "Current Distortion", "Frequency" and "Power Factor"
- A further tile is shown when the device has an integrated web server
  - In the "Content" of the web server, detailed information about the PQ data analysis and events is shown



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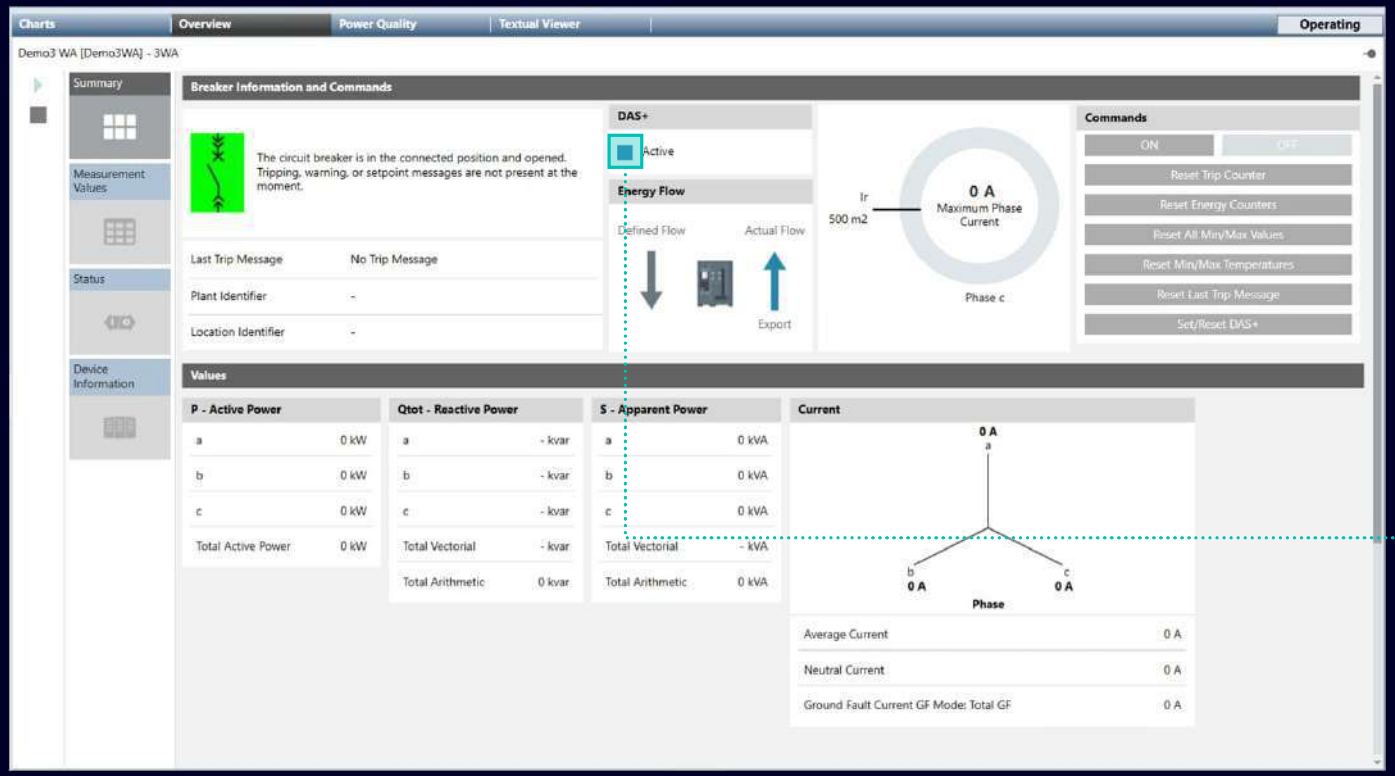
# SENTRON Powermanager
## Optimized standard views of Siemens devices (6/7)




- The „Summary“ tile of the 3WA contains important status information about DAS+ mode and energy flow:
  - Maintenance mode DAS+ (dynamic arc flash sentry). Reducing energy from arc faults and protecting maintenance personnel in accordance with maintenance mode DAS+
  - Status of the energy flow direction

→ Without being in front of the 3WA, the status of the DAS+ mode (active/inactive) and the energy flow (forward/reverse) can be monitored



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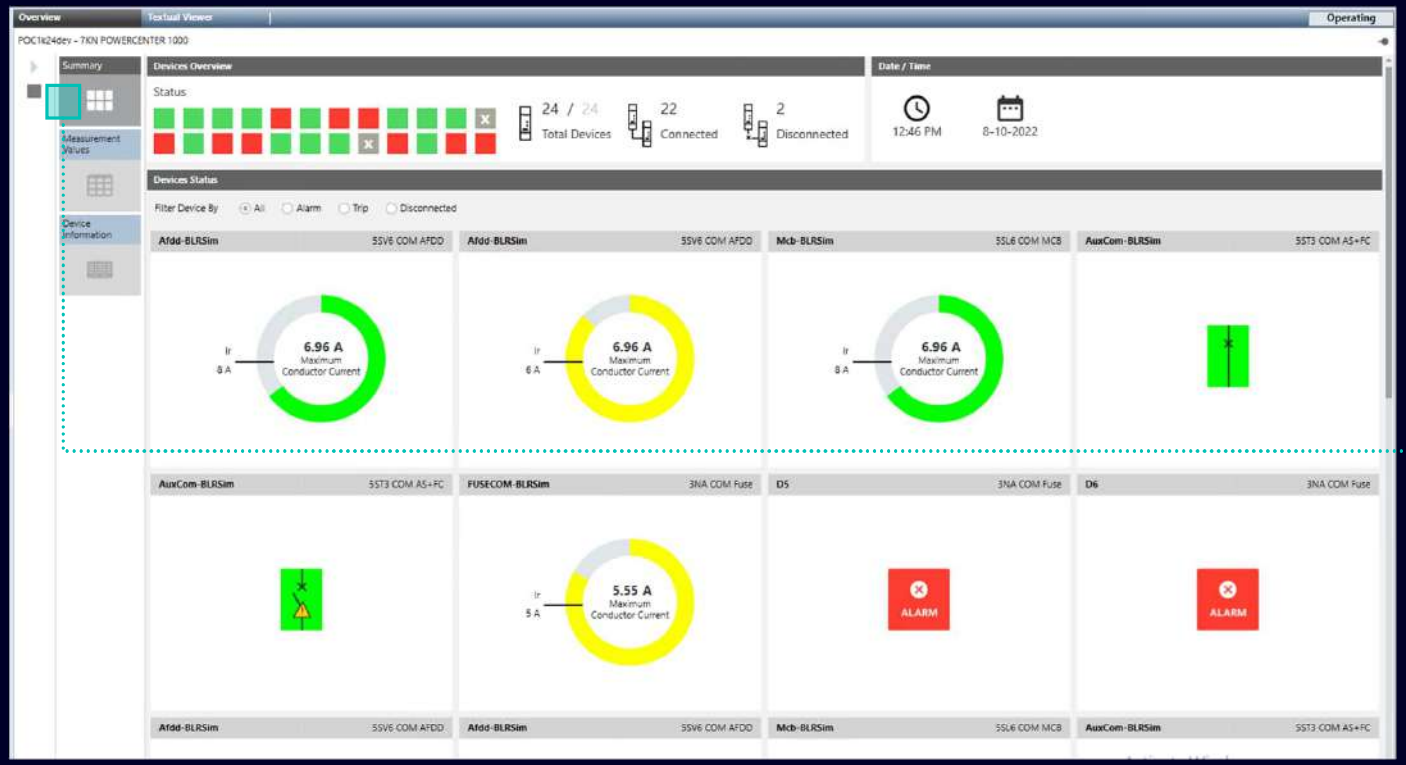
# SENTRON Powermanager
## Optimized standard views of Siemens devices (7/7)




The „Summary“ tile of the 7KN Powercenter 1000 contains:

- All status information of the 24 end devices (paired/unpaired, connected/disconnected,…)
- Current information such as status, current and alarms are visible at a glance in the overview
- Up to 24 end devices can be monitored in one overview



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# SENTRON Powermanager
# Extended standard report workflow for operating comfort



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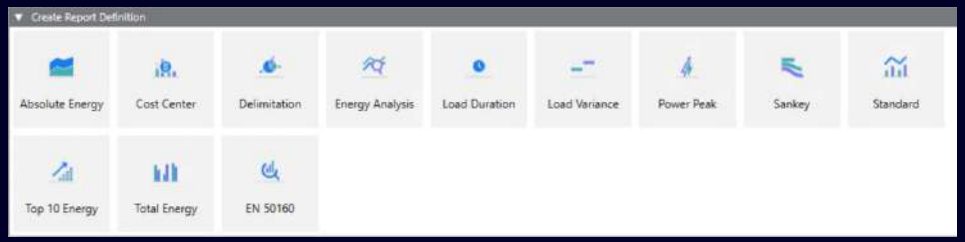
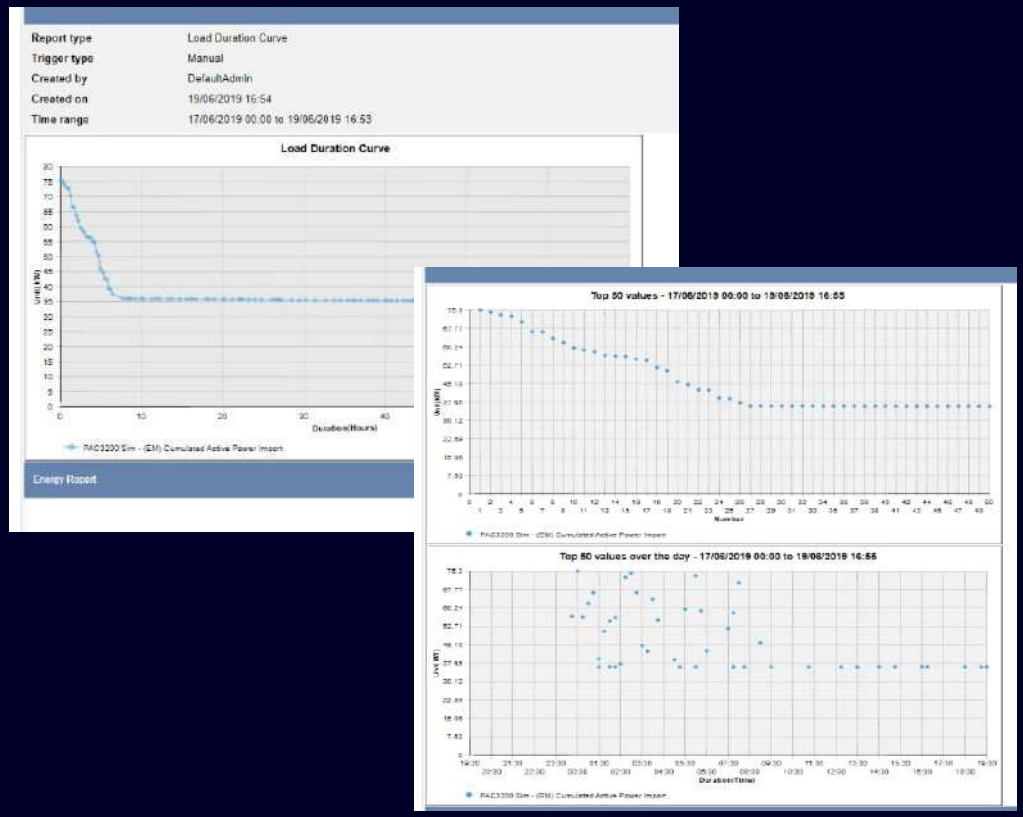
# SENTRON Powermanager
## Extended standard report workflow for operating comfort




- Report templates for power and energy analysis
- Intuitive workflow – Copy/Paste; Drag/Drop
- Individually configurable report repository structure

- **Engineering and setting up energy and power reports in a fraction of the time**
- **End users can adapt and define reports as required**
- **Improved usability**



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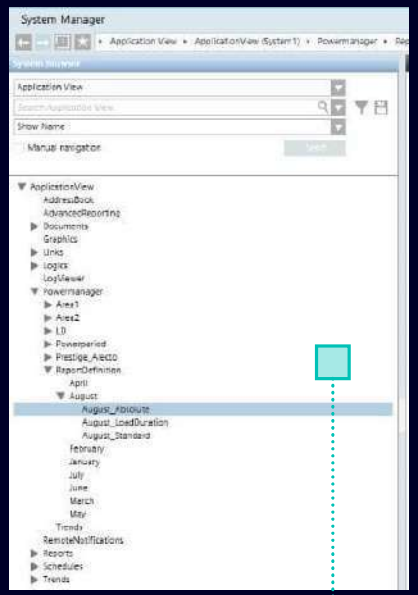
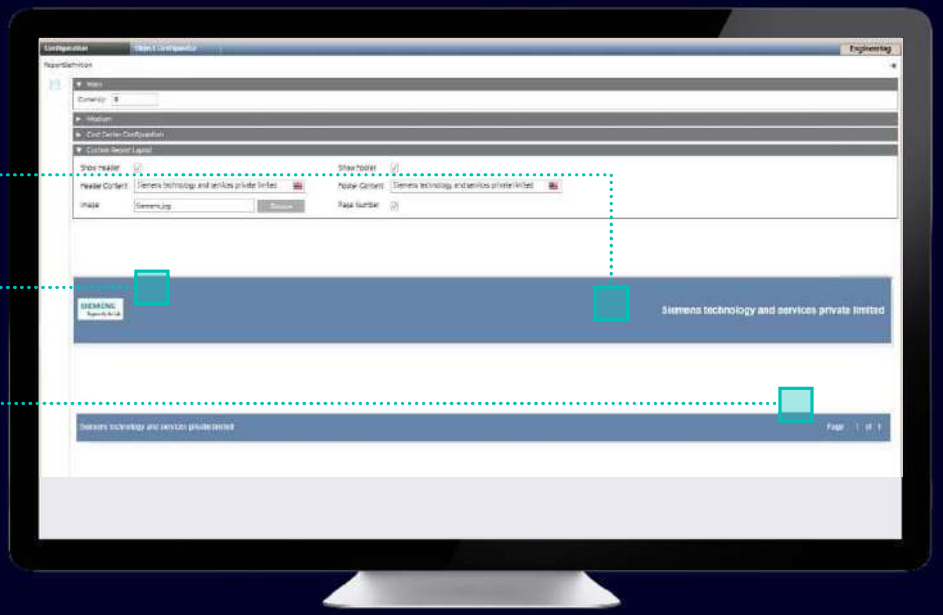
# SENTRON Powermanager Standard reports in a user-defined folder structure

# SENTRON Powermanager
## Standard reports in a user-defined folder structure




The standard report templates can be extended to include
- Company logo(s) or
- Defined header and footer
- Without additional licenses




- Users can create a report structure with several folders for easy identification
- Reports are created and stored in multiple formats and are no longer limited to XLS/PDF
- Reports can only be displayed on the computer on which the report is executed – transfer or shared access must be performed outside the SENTRON Powermanager application (unlike SENTRON Powermanager V3.5; to be remedied in an upcoming version)



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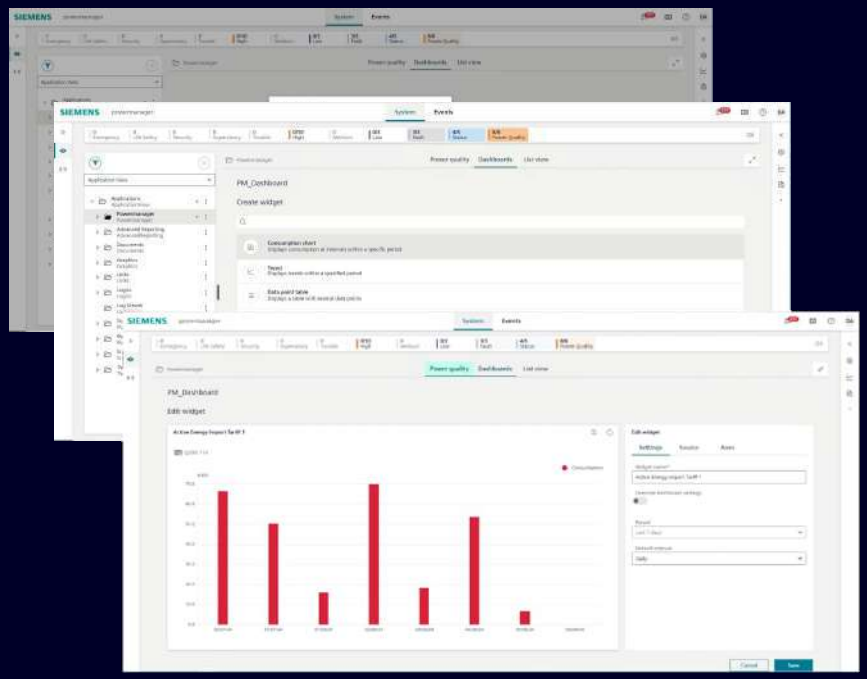
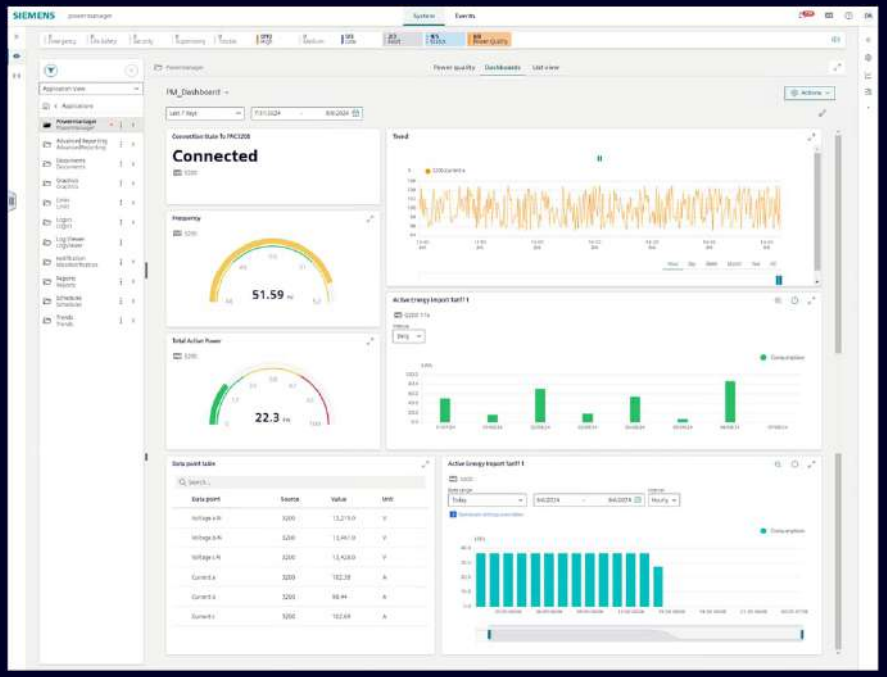
# SENTRON Powermanager Standard reports in a user-defined folder structure

# SENTRON Powermanager
## User defined dashboards






The “user defined view / dashboards" allow to create dashboards on each level (device / sector / area / system) with widgets to create individualized monitoring of live or historical values.



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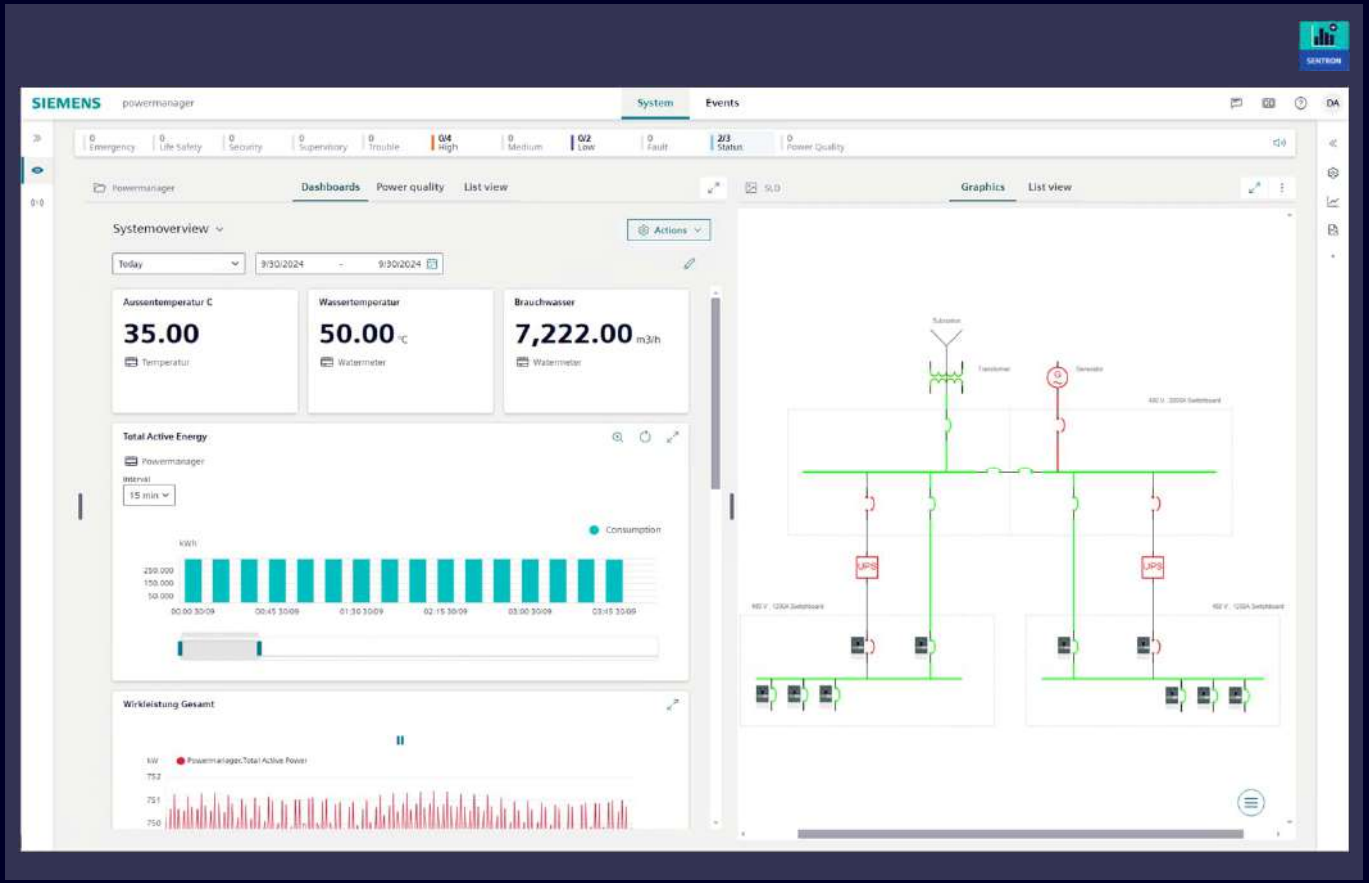
# SENTRON Powermanager
## Creating dashboards made easy

### Graphics library with hundreds of predefined elements

- Meaningful graphics can be put together from various graphical elements – even as animated elements for states or signals
- Moreover, graphics can be added (adapted) using the "Graphics Editor" option
- These graphics, created with the "Graphics Editor", run on the system without an additional license; they can even be used on another Powermanager system, on which the "Graphics Editor" option is not installed



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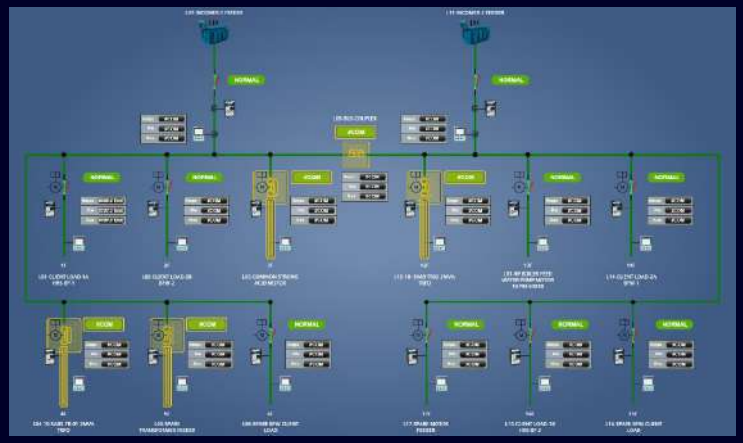
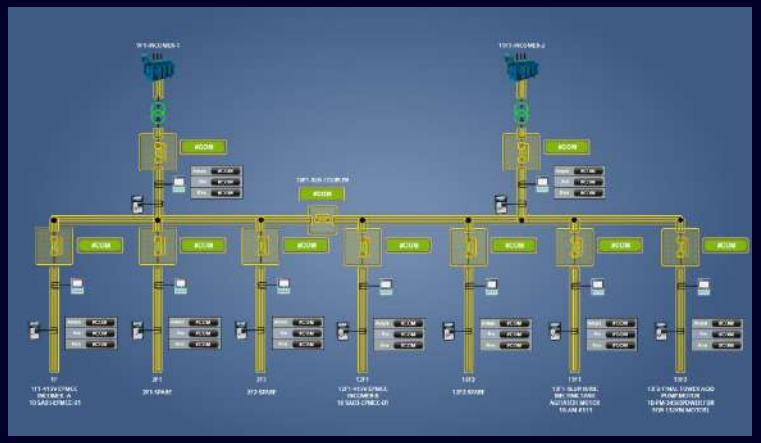
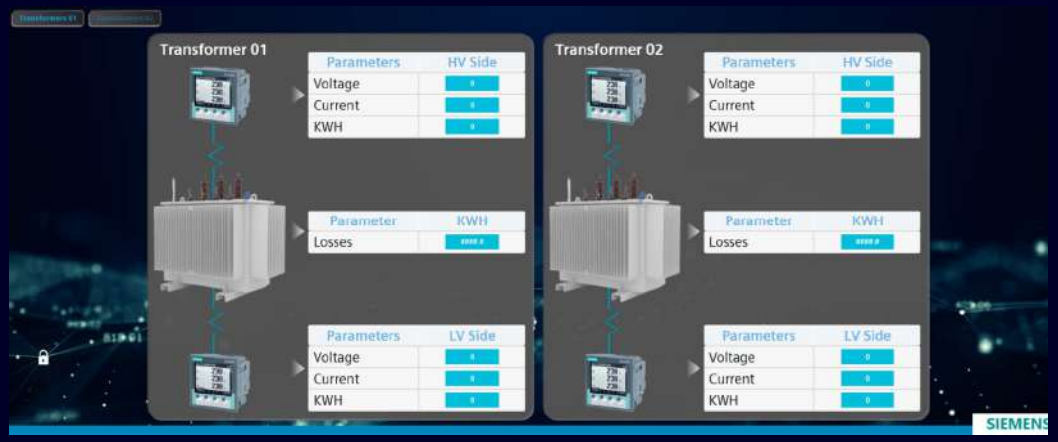
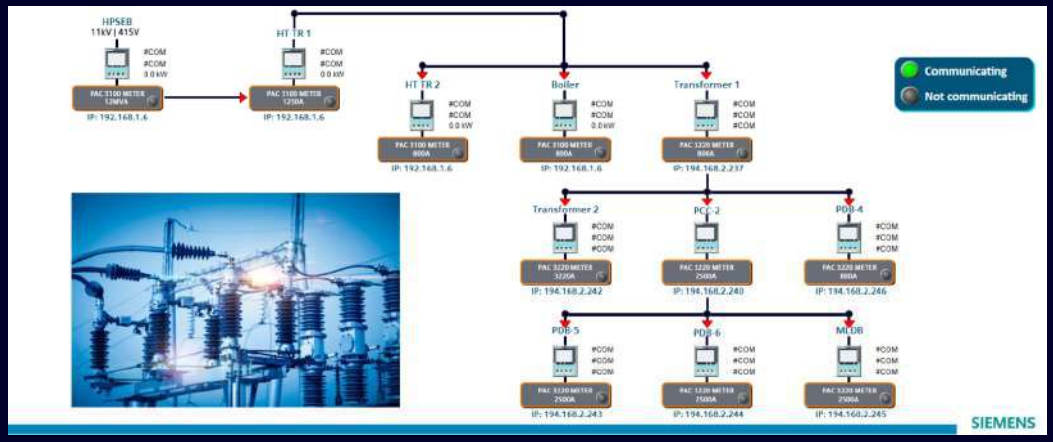
# SENTRON Powermanager
## Custom Graphic examples











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# SENTRON Powermanager
# Simple standard process for integrating further devices



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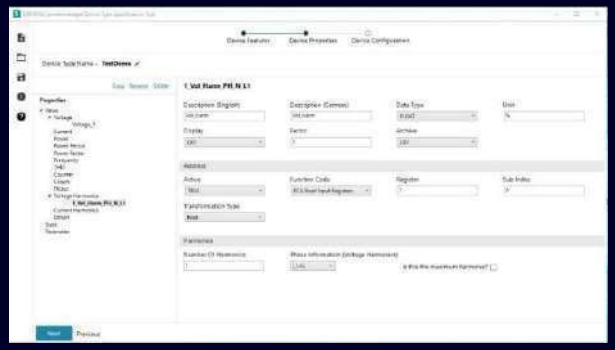
# SENTRON Powermanager
# Simple standard process for integrating further Modbus devices

**1** Define the device type, incl. hardware and communication capabilities



**2**

Selection of data points, definition of type and unit and assignment of a Modbus register

**3**

Define the display of data points such as display element, bar/line chart

- The new, independent tool, with which users can specify all details, configurations and properties of devices of other manufacturers, produces a JSON file.
- The JSON file is then imported into the SENTRON Powermanager and the new device type is created in the system.
- As soon as the device type is created in the system, any number of devices can be created in exactly the same way as regular or standard devices.

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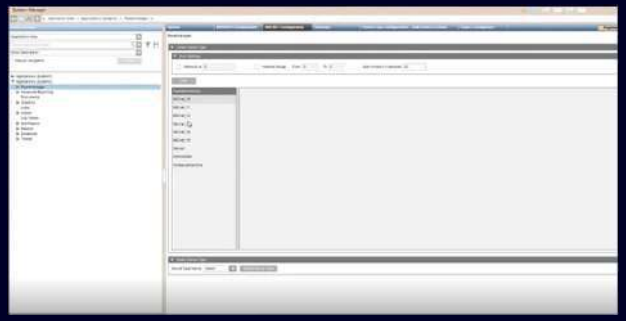
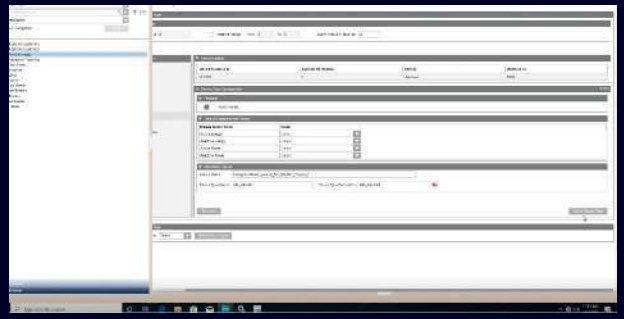
# SENTRON Powermanager
## BACnet Devices





- **Device types for BACnet can easily be created by scanning the devices.**
- **Monitoring of Water/Air/Gas/Heat devices in the known User Interface.**

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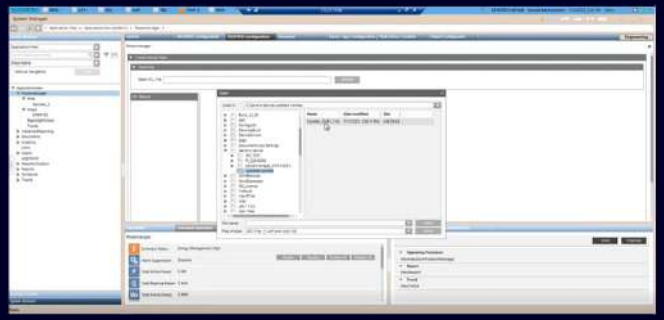
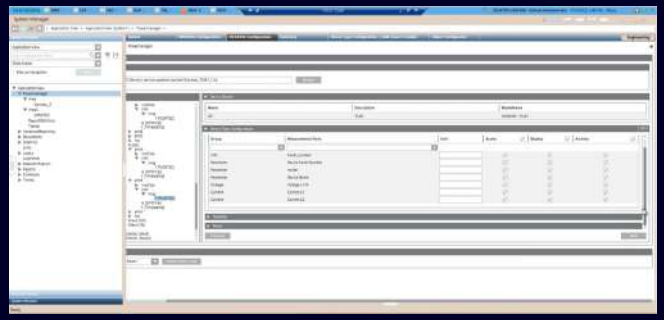
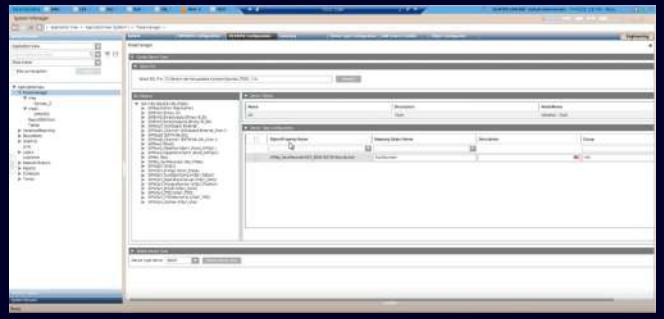
# SENTRON Powermanager
## IEC61850 Devices







- **Device types for IEC61850 can easily be created from the devices SCL files.**
- **Monitoring of MV protection devices (e.g. SIPROTEC) in the known User Interface.**

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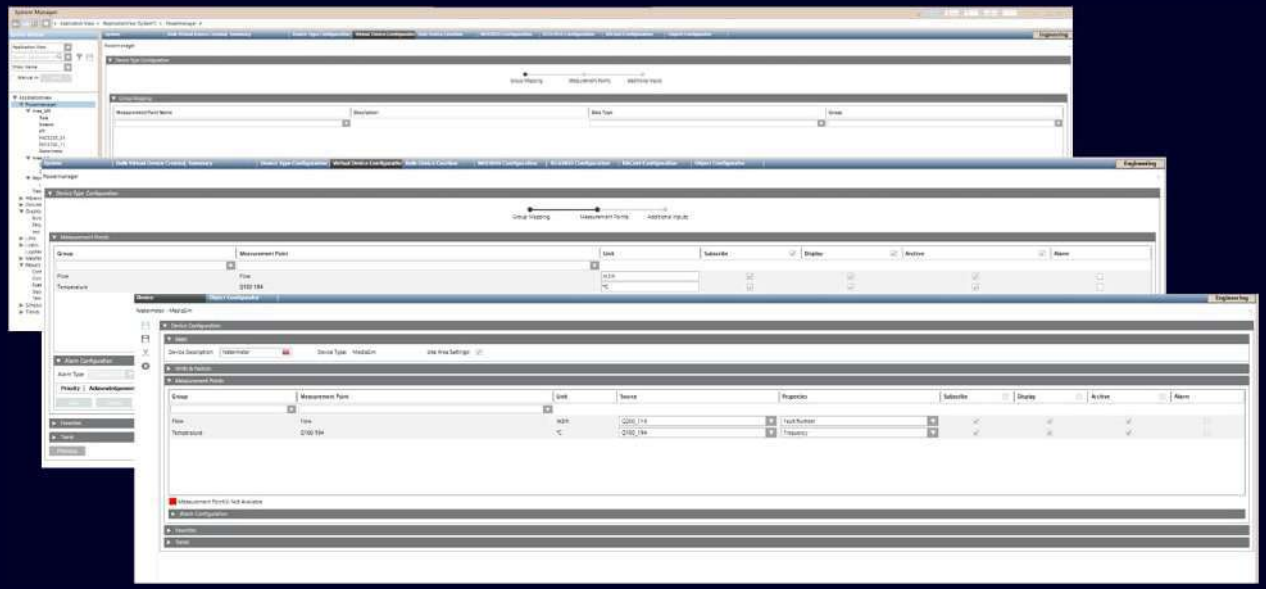
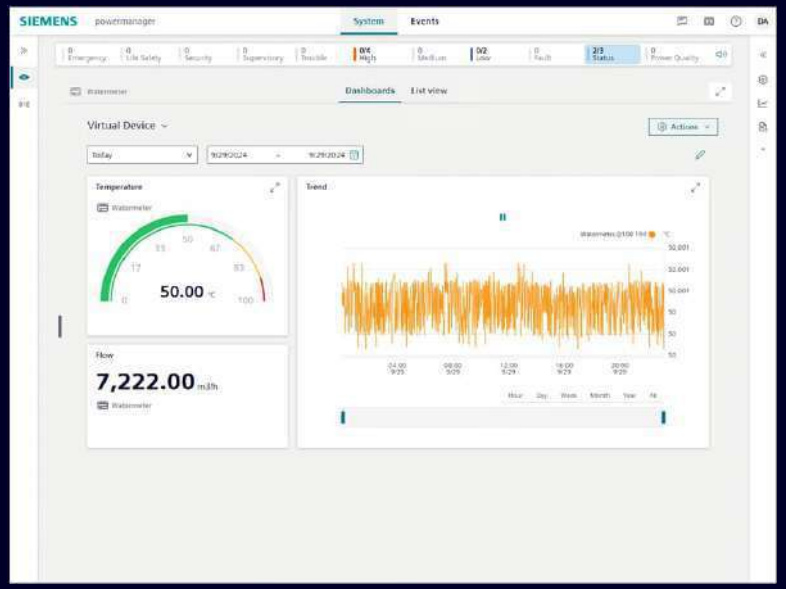
# SENTRON Powermanager
## Virtual Device






The "virtual device" allows to make existing devices, such as heat meters, which are connected to the Desigo CC management station via a controller, readable for the Powermanager module. This can be done either manually or automatically, based on certain meter designation rules. This can also be used in Standalone Powermanager to map any datapoint from the system.



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# SENTRON Powermanager
# Extended communications



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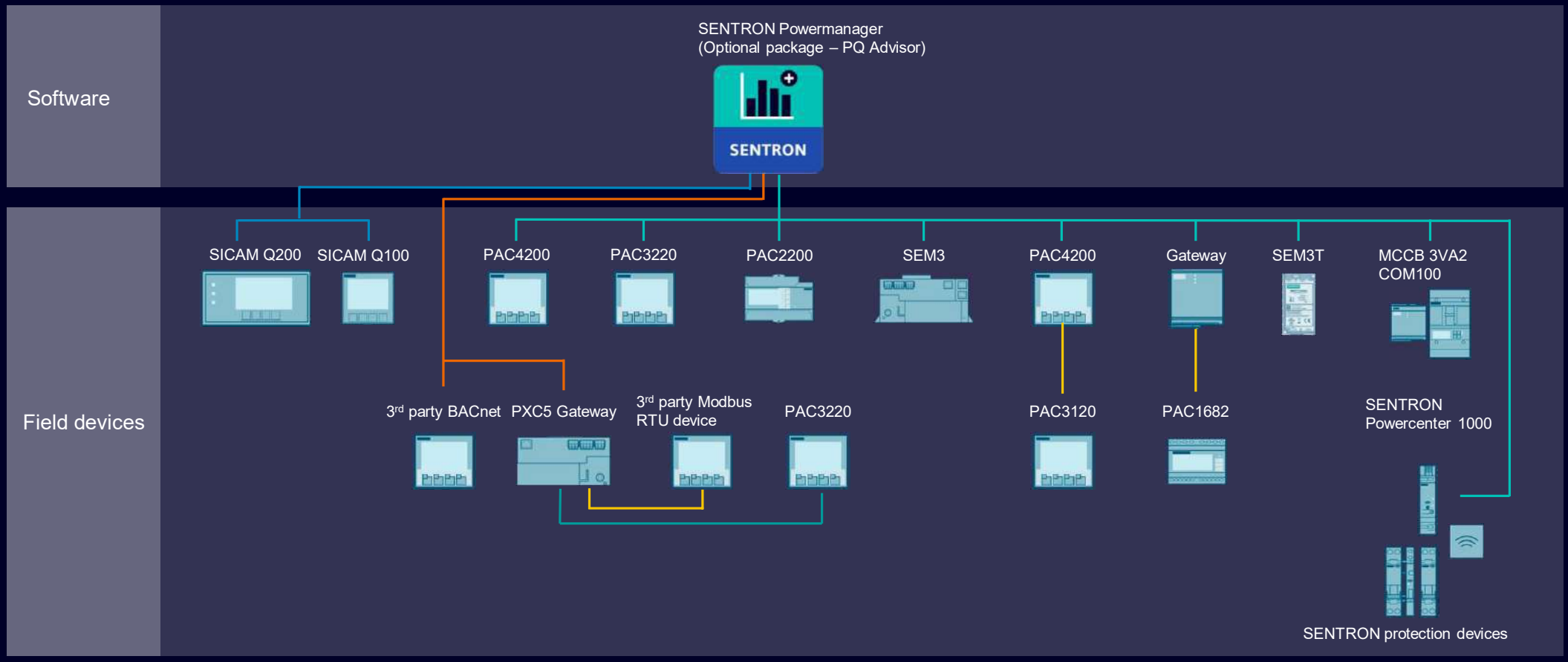
# Communication view







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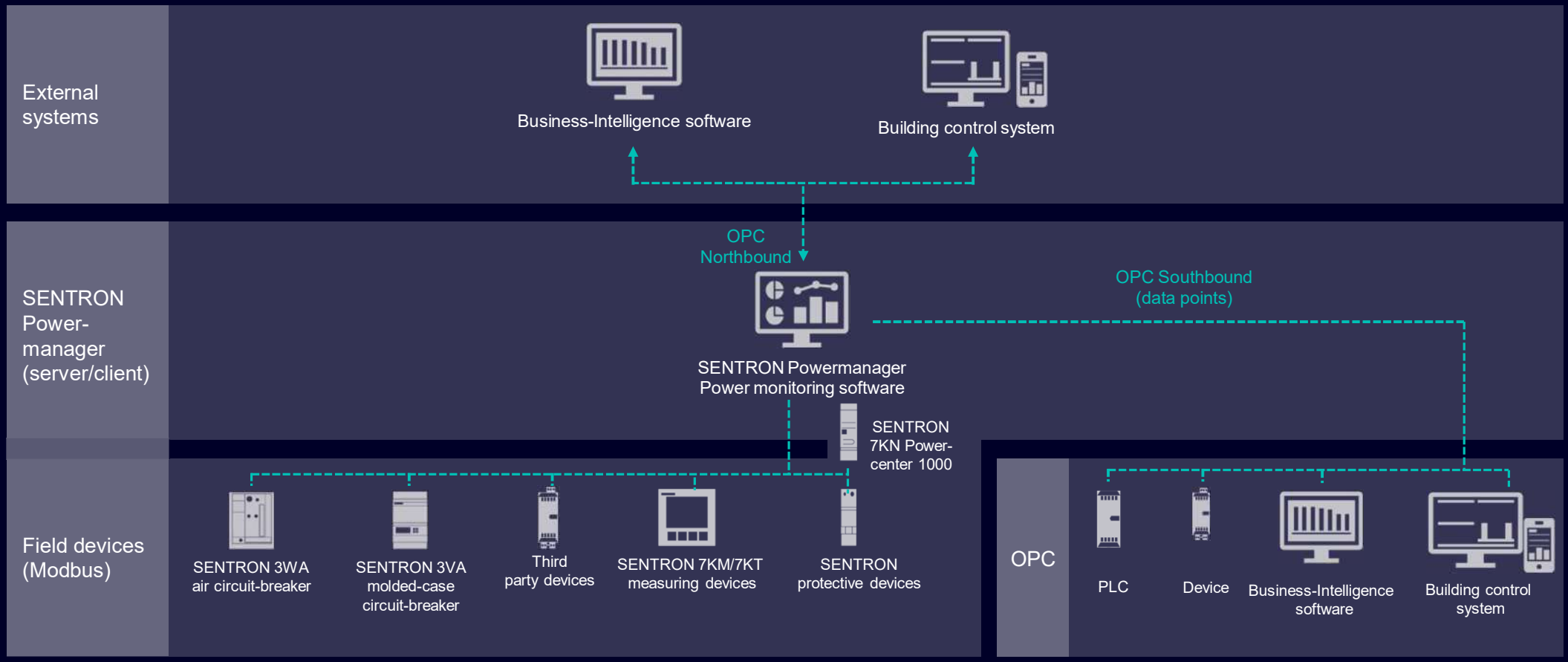
# OPC DA & OPC UA Server/Client







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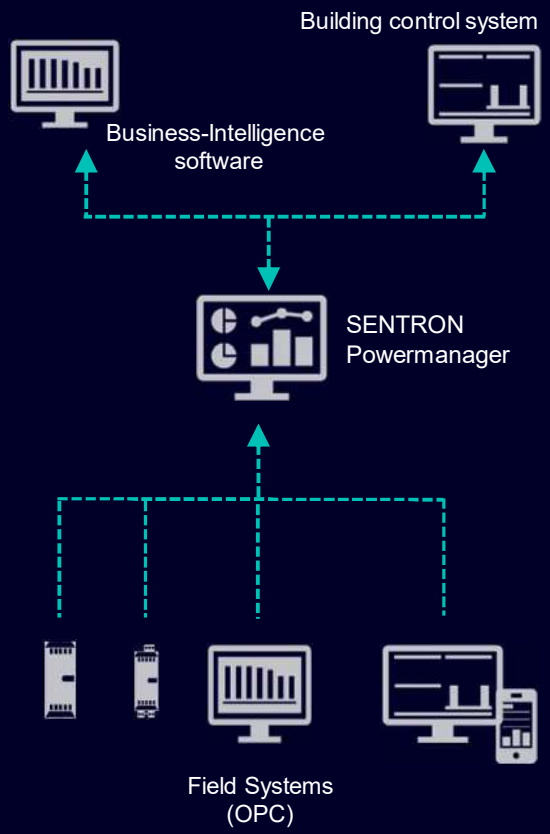
# OPC DA & OPC UA Server/Client

## Benefits

- Greater interoperability
  OPC is an open standard, so it works with a wide variety of systems -> easy to integrate with your existing setup
- Increased efficiency
  Real-time data access from your devices and systems, giving you complete control and visibility over your energy usage
- Enhanced security
  OPC UA is designed to be secure, so you can be sure that your data is protected at all times




## Powermanager – OPC Client

The Powermanager as OPC client requests data from subordinate field devices and systems.

## Powermanager – OPC Server

The Powermanager as OPC server provides the requested data to higher-level systems via the OPC interface.



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# SENTRON Powermanager
# Ordering information – system packages



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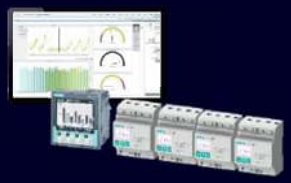
# SENTRON Powermanager
## Ordering information – system packages

| System packages | Contents | Order number | |
|---|---|---|---|
| **Powermanager System1** | Extended package (7KN2710-2CE40-0YC0)<br>• 1 x 7KM PAC4200 (7KM4212-0BA00-3AA0)<br>• 1 x 7KM PAC3120 (7KM3120-0BA01-1DA0)<br>• 1 x RS485 module (7KM9300-0AM00-0AA0) | 7KN2715-1CE40-0YC0 |  |
| **Powermanager System 3** | Extended package (7KN2710-2CE40-0YC0)<br>• 3 x 7KM PAC3220 (7KM3220-0BA01-1DA0) | 7KN2715-3CE40-0YC0 |  |
| **Powermanager System 4** | Extended package (7KN2710-2CE40-0YC0)<br>• 1 x 7KM PAC4200 (7KM4212-0BA00-3AA0)<br>• 1 x RS485 module (7KM9300-0AM00-0AA0)<br>• 4 x 7KT PAC1600, direct measurement 80A, Modbus RTU (7KT1665) | 7KN2715-4CE40-0YC0 |  |
| **Powermanager System 5** | Extended package (7KN2710-2CE40-0YC0)<br>• 5 x 7KM PAC2200 CTs, ModbusTCP (7KM2200-2EA30-1DA1) | 7KN2715-5CE40-0YC0 |  |



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# SENTRON Powermanager
# Ordering information – license concepts



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# SENTRON Powermanager
## Ordering information – license concept

### Basic license
(incl. software for server and client installation)

**Extended package:**
up to 10 devices, 2 user interface (clients), web license, reports, runtime with individual graphics, dashboard, etc.
7KN2710-2CE40-0YC0

### Device licenses
(for x additional units)

- **Device package (20):** 20 additional units
  7KN2711-1CE40-0YC0
- **Device package (50):** 50 additional units
  7KN2711-2CE40-0YC0
- **Device package (100):** 100 additional units
  7KN2711-3CE40-0YC0
- **Device package (200):** 200 additional units
  7KN2711-4CE40-0YC0
- **Device package (500):** 500 additional units
  7KN2711-5CE40-0YC0
- **Device package (1000):** 1000 additional units
  7KN2711-6CE40-0YC0

### Option packs

- **Option package "Graphics Editor 60 Days"**
  Option for creating graphics/runtime 60 days
  7KN2 712-0CE40-0YC0
- **Option package "Graphics Editor Unlimited"**
  Unlimited graphic editor for creating customer-specific SENTRON Powermanager applications
  7KN2712-0CE40-0YC1
- **Option package "Add. clients [2]"**
  Extension by 2 clients
  7KN2712-1CE40-0YC0
- **Option package "Add. clients [5]"**
  Extension by 5 clients
  7KN2712-2CE40-0YC0
- **Option package "Add. server"**
  For each additional service in a distributed system, 1 license is required
  7KN2712-4CE40-0YC0



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# SENTRON Powermanager
## Ordering information – license concept

### Option packs
(Protocols)

- **Option package OPC UA/DA Client 100:**
  Adds 100 OPC datapoints
  7KN2712-3CE40-0YC0
- **Option package OPC UA Server:**
  Add OPC UA server
  7KN2712-3CE40-0YC2

New

- **Option package BACnet protocol:**
  7KN2 712-3CE40-1YC0

New

- **Option package IEC 61850 protocol:**
  7KN2 712-3CE40-1YC1

### Option packs
(Logics & PQ Advisor)

- **Option package "Logics"**
  Allows to use state and event based reactions
  7KN2712-6CE40-0YC0

New

- **Option package "PQ Advisor"**
  7KN2712-5CE40-0YC0
  requires IEC 61850 protocol

### Update
(SUS/SUR)

- **Extend the subscription period by 12 months**
  SUR unit
  7KN2713-7CE40-0YC0
- **Restart the subscription period for 12 months**
  SUS unit
  7KN2713-8CE40-0YC0

The number of necessary units is derived from the site value on a project-specific basis.




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# SENTRON Powermanager
## Software licenses for power quality

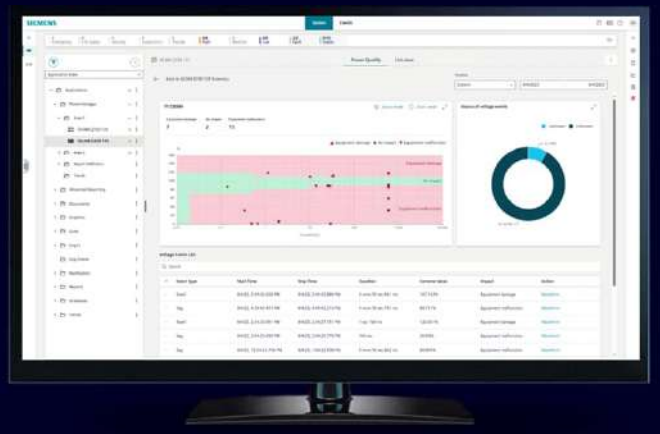
**Basic license**
(incl. software for
server and client installation)

**Extended package:**
up to 10 devices, 2 user interface (clients), web license, reports, runtime with individual graphics, dashboard, etc.
7KN2710-2CE40-0YC0

**Power quality**

**Option package “PQ Advisor”**
PQ Advisor extension requires IEC61850 protocol. Evaluation, archiving of power quality information from SICAM Q100/Q200 in EN 50160 dashboards and reports.
7KN2712-5CE40-0YC0

**Option package IEC61850 protocol:**
Add, evaluate and manage devices with IEC 61850 communication in the SENTRON Powermanager.
7KN2 712-3CE40-1YC1





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# SENTRON Powermanager
# System requirements



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# SENTRON Powermanager
## System requirements

### Hardware requirements

| | |
|---|---|
| CPU | Intel Core i7 ≥ 3,2 GHz |
| RAM | At least 32 GB RAM |
| Hard disk | SSD with 256 GB of free storage space |
| Display | VGA with at least 1600 x 900 pixels and 16-bit color depth |

### Supported operating systems

| | |
|---|---|
| Windows 10 | Enterprise/Professional (64-bit) |
| Windows 11 | Enterprise/Professional (64-bit) |
| Windows Server 2012 | Server 2012 R2 (64-bit) |
| Windows Server 2016 | Server 2016 (64-bit) |
| Windows Server 2019 | Server 2019 (64-bit) |
| Windows Server 2022 | Server 2022 (64-bit) |

### Languages/country packages

| | |
|---|---|
| IEC1 | English (UK), English (USA), German, Italian |
| IEC2 | English (UK), English (USA), Spanish, Portuguese |
| IEC3 | English (UK), English (USA), German, Chinese (simplified) |
| IEC4 | English (UK), English (USA), French (France), Polish |
| IEC5 | English (UK), English (USA), German, Turkish |
| UL1 | English (USA), Spanish, Portuguese, French (Canada) |

### Virtualization platforms

| |
|---|
| Microsoft HyperV 2016 (recommended; offered via Siemens software portal) |
| VMware VSphere 6.0, 6.5 and 6.7 |

 

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# SENTRON Powermanager
# Up-to-date with SUS/SUR



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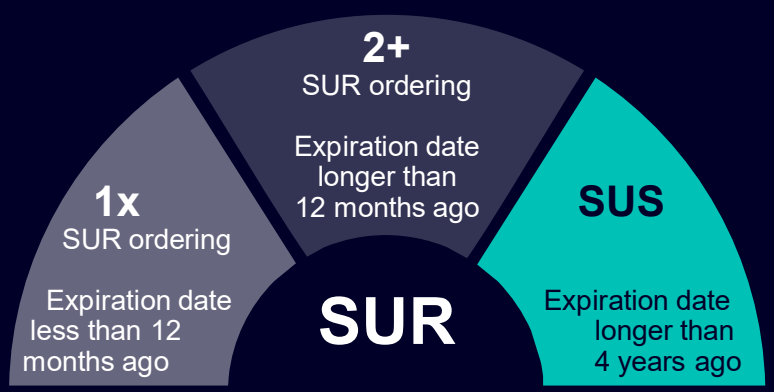
# SENTRON Powermanager
## Up-to-date with SUS/SUR

For the latest version of the SENTRON Powermanager, an active subscription is required. The runtime of the subscription and the site value can be read in the License Management Utility (LMU) module

In addition to an active subscription, there are two ways of obtaining an update:

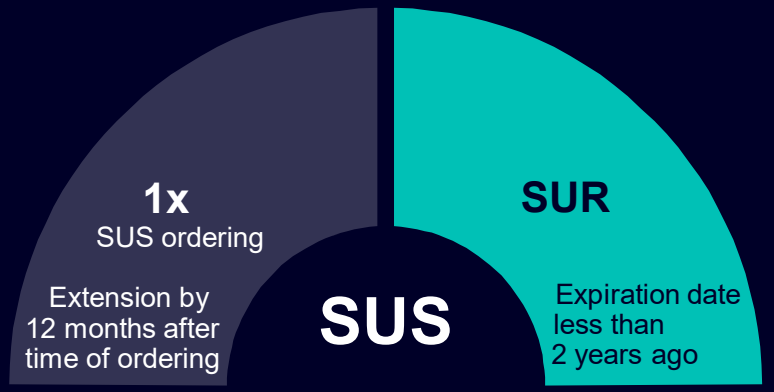

### SUR (SUbscription Renewal)

Extends the expiration date stored in the LMU by 12 months




### SUS (SUbscription re-Start)

Sets the expiration date in the LMU to 12 months after the time of ordering, irrespective of the expiration date currently stored there



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**SENTRON Powermanager**
Up-to-date with SUS/SUR

## Completed in three steps:

### 1. Step

- Location ID and individual site value
- Both can be called in the LMU module of the SENTRON Powermanager
- Via the site value, the costs of the required SUR or SUS order are calculated

### 2. Step

- The units are ordered (either SUR or SUS) via the Industry Mall

### 3. Step

- Delivery note is transferred
- Change to the expiration date in the system is performed automatically
- Update is also possible in offline installations via the LMU function "Offline SUR/Maintenance"



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# SENTRON Powermanager
# Migration from classic version 3.6 to SENTRON Powermanager



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**SENTRON Powermanager**
Migration from classic version 3.6 to SENTRON Powermanager

**Migration steps from classic version 3.6 to SENTRON Powermanager**




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# SENTRON Powermanager
# Getting started with the software



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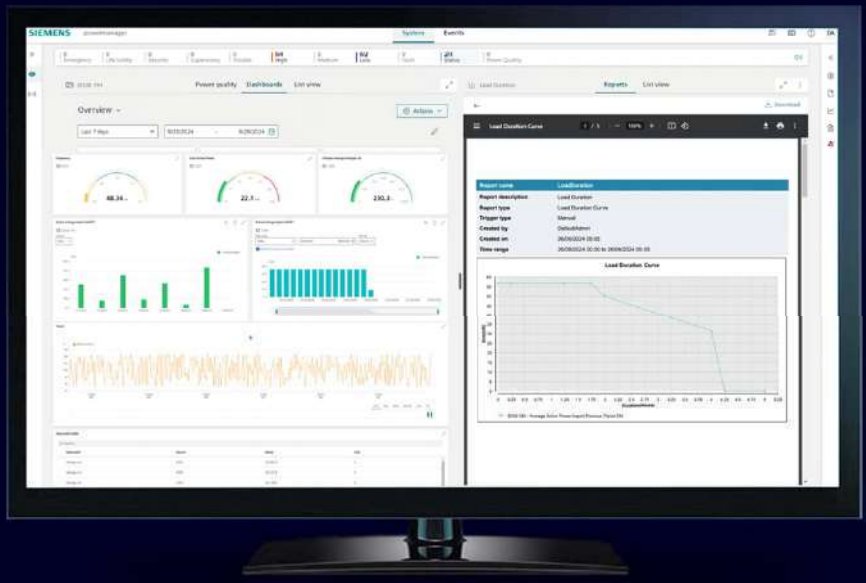
# SENTRON Powermanager
Test now for 60 days free of charge!

To obtain a free SENTRON Powermanager trial license for one-time use (limited to 60 days), please contact us: https://new.siemens.com/global/en/products/energy/low-voltage/forms/sentron-powermanager.html



The license must be activated online following the process described in the manual (using an active internet link). This is only possible once and cannot be repeated after expiration of the 60 days. After expiration of the 60 days, SENTRON Powermanager switches off. A SENTRON Powermanager application run with this trial license cannot continue to be used with a new trial license after expiration of the 60 days. If you want to continue to use SENTRON Powermanager, please purchase a regular license.



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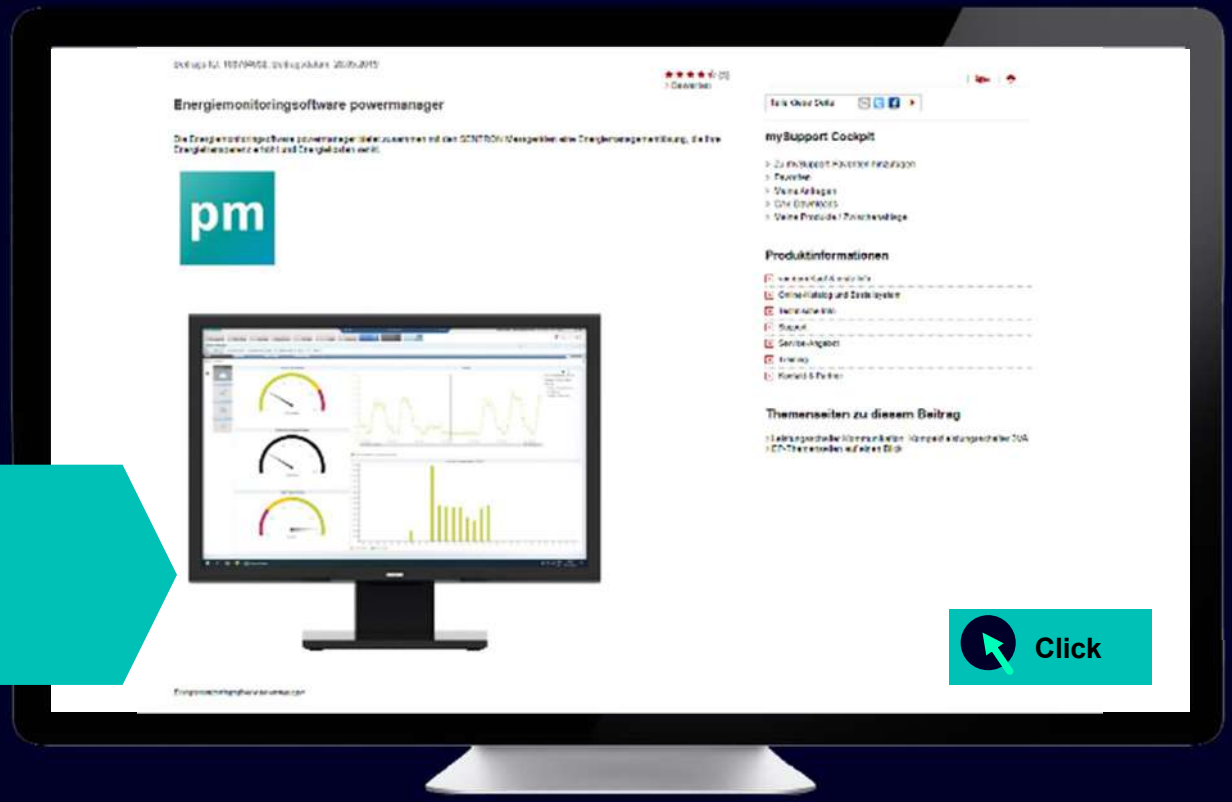
# SENTRON Powermanager

**For further information and training just click**







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## Disclaimer



Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.





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