

# **SAUTER Vision Center**

Universal building management – easy and future-proof.



## SAUTER Vision Center at a glance.

# Integral operation and visualisation in a nutshell.

#### For projects of any size

SAUTER Vision Center is suitable for buildings of all types – from a single building to dispersed premises, larger projects, administration buildings to search labs.

#### Easy to operate for all users

With personalised dashboards every user can individually compile the information relevant to their area of responsibility and present it in an overview.

#### Scenario Manager for very easy operation

The Scenario Manager can be used to define and assign scenarios in SAUTER Vision Center with just a few clicks; providing an even greater flexibility to plant management.

#### Access from any location

SAUTER Vision Center offers information on all conventional end devices such as desktops, laptops, tablets, smartphones and smartwatches.

#### Central building, energy and maintenance management

SAUTER Vision Center has a modular structure and is freely scalable. The integration of specialised auxiliary modules enables it to be used for a vast range of building tasks.

#### Precise insights for smart building management

SAUTER Vision Center creates user-specific evaluations for owners, managers and user whilst supporting you in optimising your building operations.

#### Security and compliance

With special functions for traceability and gap-free data recording, SAUTER Vision Center ensures increased reliability for installations and processes that are critical for all companies.

#### Investment protection thanks to standards and expandability

SAUTER Vision Center is BACnet-certified and employs standardised interfaces for future-proof integration of your system landscape – from the temperature sensor to the ERP.

### Simplified processes

for maximum efficiency.

# Enjoy freedom in building and energy management.

# More efficiency in building and energy management

Lean, powerful building and energy management that is geared towards sustainability provides decisive advantages. You get more comfort, reliability and increased availability for your installation, with a smaller amount of effort. SAUTER Vision Center is the integral solution that makes your processes significantly easier and meets user requirements cost effectively.

## Higher energy efficiency for the entire building life cycle

For something to be optimised, it must be measured. Whether in a new building or a refurbishment, SAUTER Vision Center can identify the potential for improvement in how installations operate. This enables optimum performance and the highest level of comfort for all building areas and specific rooms used.

#### All-round process integration

Connecting autonomous applications with a central management solution opens up new potential. With its standardised interfaces and thus its flexible, open design, SAUTER Vision Center is easily integrated into company processes and work procedures. The company-wide, inter-departmental exchange of information leads to more effective processes and faster response times, for the benefit of the building users.

#### Mobile and state-of-the-art

If you are responsible for multiple buildings or dispersed premises and are constantly moving from location to location, you would appreciate a management dashboard that's available everywhere and at all times. Whether via smartphone, tablet or desktop – SAUTER Vision Center provides all users with the information relevant to them, wherever they maybe at the time.



## At home in all buildings.

# Control centre and supervision for different areas of responsibility.

#### Energy-efficient office buildings, schools and campuses

Intelligent buildings create working and learning environments that are more reliable, safer, more productive and more comfortable whilst at the same time increasing resource efficiency. With the integration of stand-alone systems and interfaces with ERP applications, SAUTER Vision Center provides you with a total overview in order to optimise performance, operating efficiency and ROI over the entire life cycle of the building.

#### Reliability in industrial and production buildings

SAUTER Vision Center centrally combines the systems, processes and energy consumption within a plant in order to provide early detection of non-conformity in critical set-ups and to correct them. Gap-free data recording allows ambient conditions, operating parameters and user interventions in production processes to be called up and traced at all times.

## Compliance for hospitals, laboratories and pharmaceutical installations

SAUTER Vision Center fulfils the safety requirements for a building and energy management system in the life science and food industry. The system fulfils the requirements of FDA CFR 21 part 11 and can be validated accordingly.

#### Technical safety in airports and train stations

The convergence of air-side, terminal-side and land-side systems for building automation makes great demands on the central management system. SAUTER Vision Center helps the operators of transport hubs to ensure availability, energy efficiency and comfort in environments with high numbers of visitors.



### Overview and easy operation

for all users.

# Intuitive interface with personalised dashboards.

#### Simple user navigation

The user-friendly design of SAUTER Vision Center makes it easy to operate. A mouse-click or a tap on the touch-screen takes users intuitively to all visualisation and operating functions. Live data and historical charts can be accessed directly from the system diagram. Overviews of room comfort, energy consumption and a range of other key figures highlight the potential for optimisation.

#### Individual dashboards

Whether for service staff, facility or energy managers, the user interface of SAUTER Vision Center adjusts to the area of responsibility and preferences of each user. A customised dashboard with all of the relevant information can be set up very quickly. Reports, evaluations, detailed real-time data and data from the internet (e.g. weather forecast) can be integrated easily.

#### More flexibility in room automation

Building operators expect the highest degree of flexibility. In SAUTER Vision Center, it takes just a few clicks to adjust the room usage and size. The room configuration can be altered easily by just clicking on the room image segment.

#### Homogeneous and easy to operate

The responsive design of SAUTER Vision Center automatically adjusts the the key elements, images and functions, to fit the size of the user HMI device. This ensures optimum operation with a tablet, smartphone or PC.

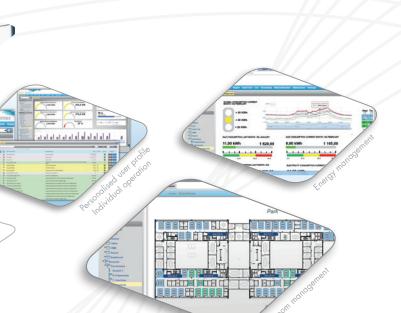
#### Pre-defined scenarios

a single mouse click or

planned as an auto-

matic function.

The Scenario Manager makes it easy to plan and execute recurring events or actions for all functions within a building. For example, the event manager or external program such as a room reservation system, can enable optimum room comfort for a given time and duration manually with





# Integrated building, energy and maintenance management.

# A modular all-rounder for the modern facility manager.

#### **Building Management Plus**

SAUTER Vision Center does more than just performing the conventional tasks of a building management system, such as visualisation, monitoring, logging and controlling installations. The solution also supports your energy and maintenance management. Thus it fulfils the high demands of investors, owners and operators for energy- and cost-efficient operation.

#### Energy monitoring module

With the optional energy monitoring module, SAUTER Vision Center combines building management with the functions of energy management in a single application. Both parts of this modular building and energy management solution (BEMS) take the same process data from a shared database. This means that up to date energy data is also available immediately.

#### Maintenance management module

The optional maintenance module provides important information for service planning, service tasks and preventive maintenance. Users can record devices, equipment and their properties, define maintenance intervals and criteria, as well as document maintenance work. The data gathered provides valuable information about the installation, enables the maintenance schedule to be adjusted specifically to actual operation, and reminds users about up-and-coming work.

#### Scenario Manager

The definition of scenarios for the building automation makes an installation much easier to operate. The SAUTER Scenario Manager enables a plant operator without a great deal of prior experience to predefine

recurring situations in SAUTER Vision Center and assign them to specific time windows. It works in much the same way as a calendar and is used intuitively with just a few clicks. The simple operation enabled by scenarios in SAUTER Vision Center makes the management of installations even more flexible and economical.



### **Protecting investments**

and continuously optimising building operation.

Future-proof thanks to expandability and standards.

#### Ready to go - any time, any place

As a web-based building management solution in the HTML5 standard, SAUTER Vision Center can be used with any operating system and therefore practically every internet browser, whether it is Linux, Unix, iOS, Android or Windows. It is not necessary to install additional apps or plug-ins.

#### Standardised protocols

With the certified BACnet client in SAUTER Vision Center and the OPC UA client, virtually all devices and information sources in a building can be connected. These standardised protocols enable both SAUTER and non-SAUTER devices to be incorporated. Vision Center has an OPC UA/DA gateway for the integration of older OPC DA servers. SAUTER Vision Center also offers operation as an OPC UA server, allowing all building management information to be integrated for other applications via an OPC UA client.

This variety of integration options for a whole host of protocols such as M-Bus, Modbus, LON and installation-specific OPC servers, as well as BACnet, provides the highest level of flexibility to control diverse building systems with the building management software. This facilitates plannable and successive migration of building systems to the SAUTER Vision Center central building management.

#### Integration of existing SAUTER standard - novaNet

One of the most important tasks for SAUTER is the economical integration of EY3600 novaNet systems into SAUTER Vision Center. Via the direct connection of novaNet, existing plants can benefit directly from the state-of-the-art building management system without having to replace the current automation stations. This enables a gentle, step-by-step and economical migration of existing systems.







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#### Interface for additional equipment and systems

Even systems outside the HVAC area and industry-specific applications can be connected to SAUTER Vision Center via the API interface. For example these can include, systems for fire protection, video monitoring, lift control, access control and ERP software. Thus providing the customer with the option to individual apps for SAUTER Vision Center. Further integration is also possible via OPC servers and corresponding gateways.

#### IT integration

SAUTER Vision Center uses the latest software technologies based on Microsoft SQL and Internet Information Services (IIS). SVC can naturally be installed on virtual machines and use the IT infrastructures provided by the customer. Individual program parts such as MS SQL, SVC Core with IIS or the SVC data provision service can be installed on separate machines, which is typically the case in large projects if required, normal practice for large scale projects.

For larger companies in particular in which the user administration is performed centrally, the LDAP function frequently used and SVC is integrated into the Microsoft's active directory structure.

#### Gap-free security

Communication with SAUTER Vision Center is protected via encrypted protocols. If required, virtual private networks (VPNs) can provide additional protection for the communication. It is also possible to define minimum requirements for authentication and password security.

With the audit trail for fulfilling verification obligations and additional functions for FDA compliance, SAUTER Vision Center is also used in projects in the life science and pharmaceutical sectors that require certification.



## **Annecy Bio-Chaleur**

The Annecy Bio-Chaleur biomass heating plant provides heating for a whole district using wood and gas. Thanks to SAUTER Vision Center, the operators always have a complete overview of the central production system and the substations distributed across the network.

The city of Annecy in the French Alps is banking on renewables. By converting its district heat production from fossil fuels to wood, the city is reducing its annual  ${\rm CO}_2$  emissions by 12,000 tonnes.

#### Overview of the complete system

The entire installation of Annecy Bio-Chaleur is controlled and visualised using SAUTER Vision Center. This means that staff at the heating plant in the northeast of the city always have a complete overview of what is happening at the plant itself as well as at the 15 substations distributed around the district.

#### Efficient performance and consumption monitoring

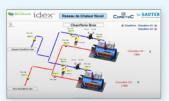
Each substation in the network is constantly sending local data such as performance, consumption, water volume and pipe pressure to the control centre. SAUTER Vision Center uses this data to perform efficient control of the entire network. The three-dimensional visualisations of the system components are very clear and give the operating staff an instant overview.

#### Specific profiles for different users

Individual profiles with restricted access rights and views can be created in SAUTER Vision Center for specific external users. This means that municipal administrators with different user profiles or building management companies can quickly view the current key figures from Annecy Bio-Chaleur.







The three-dimensional visualisation of the wood chip plant in SAUTER Vision Center.



Visualisation of a substation with all the main meter values (e.g. energy, pressure, water volume, temperature).

### Paulinenpflege Winnenden

Paulinenpflege Winnenden, near Stuttgart, offers people with disabilities a caring environment at eleven locations. After a successful refurbishment, SAUTER Vision Center helps Paulinenpflege save resources by using innovative energy sources.

Staff at Paulinenpflege Winnenden have been assisting children, young people and adults with disabilities for almost 200 years. In 2013, this facility steeped in tradition decided to upgrade its energy network and tasked SAUTER with this forward-looking project.



To reduce the consumption of resources at the older locations, the renovation programme used modern heat pumps, ice storage, waste heat usage and heating using wood chips.

These different approaches at the various locations presented a challenge, as did the very diverse technical requirements of the buildings.

Paulinenpflege can now count on SAUTER Vision Center to monitor and visualise all of the systems and energy flows. The solution is web-based, which means that technical staff can monitor each installation's performance and make adjustments remotely if required. Furthermore, because SAUTER Vision Center has a modular structure, the overall system can be easily extended to include more premises later on.

"We offer our services for many different locations within an approximately 15 km radius of Winnenden. SAUTER Vision Center provides decisive support for the implementation of the new energy concept through the remote monitoring of the sites and the flexible expandability in the future development phase."

Ulrich Speidel, Technical Director of Paulinenpflege







Visualisation of controls for the wood chip heating system in Paulinenhof with possible backup support from an oil boiler.





Visualisation of the heating and cooling systems in Winnenden with use of ice storage and waste heat and solar absorbers for ice storage regeneration.

### **Treant Zorggroep**

For patients in hospitals and care facilities, the expert knowledge of the medical staff is not the only crucial factor, but also the correct functioning of all technical equipment. Building automation also plays a major part in ensuring the health and safety of patients and staff.

Treant Zorggroep aims continuously to optimise its facilities. It has many complex technical installations, including air conditioning units in operating theatres, negative- and positive-pressure controls in labs, as well as temperature and humidity control systems. Building automation is the key to the technical facilities used for Treant Zorggroep's healthcare services.

#### Technology that serves its users

SAUTER Vision Center provides the interface between the individual users and the technology – a central user interface for the integrated systems of all generations from various providers at the different locations.

The building management system is completely web-based, is integrated into the entire company network and can thus be used from anywhere. This enables the users to exchange knowledge between the individual locations, improving the standardisation and therefore efficiency.

In Treant Zorggroep, two hospitals and one residential home are visualised and controlled in the first development stage, wherein the operation is standardised for the user, even though the building management software combines SAUTER BACnet devices of the modulo 5 family, BACnet devices of a third-party manufacturer and SAUTER novaNet in a single system. Thus, Treant Zorggroep can benefit from the advantages of a new HTML5-based building management system without having to replace the existing building technology. This step-by-step, and therefore economical, migration of individual sub-areas was one of the main factors for choosing SAUTER Vision Center.





Temperature monitoring and regulation of the rooms in the Scheper Hospital in Em-



Regulation and monitoring of the cooling system in the Bethesda Hospital in Hoogveen

#### **About Treant Zorggroep**

Treant Zorggroep has three hospitals and 20 nursing and retirement homes serving 300,000 residents. The company provides medical treatments, nursing and geriatric care and rehabilitation therapies and employs 6,500 regular staff and 250 specialist doctors.



Components

**Services** 

**Facility Services** 



