YZP 480...495: SAUTER Vision Center

SAUTER Vision Center 3.0 - latest-generation modular building management software for energy-efficient buildings

The SAUTER Vision Center (SVC) is a web-based building management system for individual systems and buildings, as well as for dispersed premises.
The SAUTER Vision Center is used in all kinds of sectors, for example in hotels, office buildings and public buildings. Using the building management software, geographically separate properties can be centrally operated and visualised. Examples of this are hotel chains, businesses with branch offices and various public buildings in the same municipality.

It guarantees efficient operation and provides visualisation in one place of all plants and equipment systems, because access takes place via a browser, and is possible any time and anywhere.
To integrate different equipment systems, SVC supports the non-manufacturer-dependent BACnet standard, as well as connection to OPC servers for integrating different protocols in the building automation system.

In order to fully support the integration options, it is also possible to directly connect SAUTER modu-Web Vision via web services and SAUTER novaNet.
This makes it possible to connect existing systems when converting to the new generation of building management software without having to replace the existing automation level.

The integrated energy monitoring module makes it possible to integrate meters and additional manual entry, as well as to view energy consumption directly in the SVC.

Daily, weekly, monthly and annual consumption can be automatically calculated and represented in diagrams. This optional module is the basis for energy monitoring and efficient control of building operation.

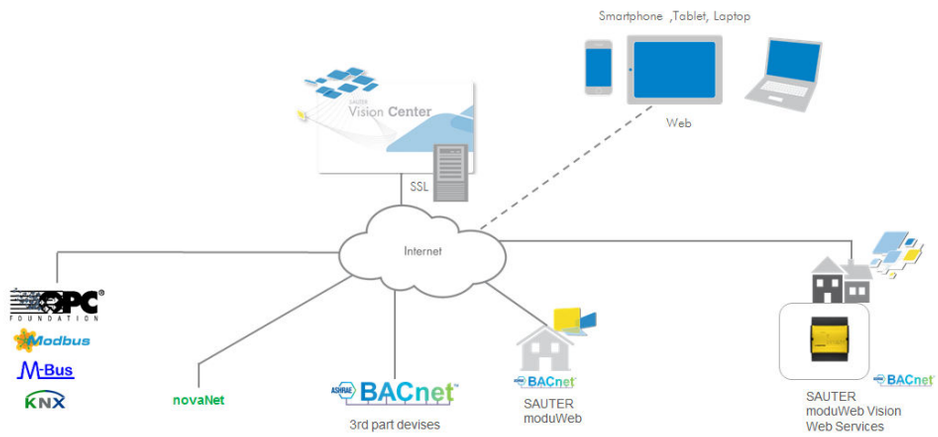
Overview of types

***i* SVC licences and options**

Type	Description
YZP480F200	Basic package of 500 addresses with maintenance
YZP480F099	DVD
YZP480F999	Engineering licence with maintenance
YZP481F200	100 objects with maintenance
YZP481F210	1000 objects with maintenance
YZP481F220	10000 objects with maintenance
YZP481F230	25000 objects with maintenance
YZP483F300	novaNet integration *
YZP484F200	License key for VM
YZP485F201	Basic energy management with maintenance
YZP487F201	OPC UA Client with maintenance

** YZP483F300 novaNet connection requires: YZP487F201*

Features / highlights

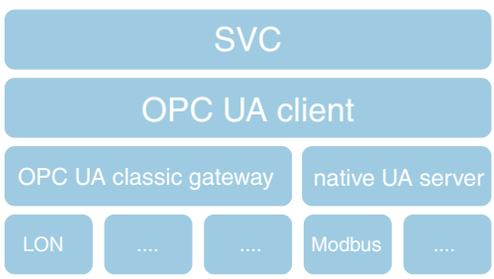


Integration options

- BACnet
- OPC UA Client
- OPC DA via UA/DA gateway (gateway not supplied)
- moduWeb Vision BACnet Server via web services
- SAUTER novaNet

OPC UA Client

- The basic precondition for connecting different protocols and therefore for integrating existing systems and manufacturers which do not support the BACnet standard.
- SVC is a Windows service. Some connection components such as the OPC UA/DA gateway run as independent applications.



SAUTER visualisation family - design and operation

The SAUTER **visualisation family** includes SAUTER moduWeb, SAUTER moduWeb Vision and the SAUTER Vision Center.
The product family stands out with the following advantages:

- Uniform operation and navigation
- Uniform visualisation and plant diagrams
- Uniform “engineering” concept for the entire visualisation family
- Scalable cabinet visualisation in small systems with moduWeb over the complete web server representation with moduWeb Vision for medium-sized systems, or higher-level PC- and server-based SAUTER Vision Center management level
- Integration of all equipment systems with standardised data interfaces

HTML 5 - independent of location and platform

Operation independent of operating system using various internet browsers on desktops, tablets and smart phones. Can be used any time, anywhere thanks to HTML technology.

Building management with integrated energy monitoring

Integrated energy monitoring module for calculating, displaying and comparing consumption values

Technical requirements

System requirements

Processor	Intel i7 2.8 GHz or higher. SVC supports multi-processor architectures, processors and chipsets that use hyper-threading technology.
RAM	At least 8 GB (< 5 users)
Hard drive	At least 200 GB
Graphic resolutions	1200 x 1024 or higher
TCP/IP configuration	*The IP address can be permanently or dynamically allocated by a DHCP server*
Operating systems	Windows 2012 Server R2 (multilingual, 64 bit), Windows 2008 Server R2 (multilingual, 64 bit), Windows 7 SP1 or higher (multilingual, 64 bit)
Web server	MS IIS (Internet Information Server) version 7.0 or higher
SQL database	MS SQL 2012 R2 Express (supplied), optionally MS SQL 2012 R2 can be used
Internet browser	Microsoft Internet Explorer 11 or higher, Mozilla Firefox 22 or higher, Google Chrome 40.0 or higher

Notes
We explicitly recommend installing SVC on a computer that is only used for technical building management (hardware or virtual machine).
If used by more than 5 users at the same time, the RAM must be expanded (at least 16 GB).

Summary of functions

General product information.

- Users have the option to define and bookmark their own views such as lists, graphs and tables in the form of documents
- All templates and documents can be exported via the web interface (CSV, PDF)
- Multiple languages:
  - All users can select their own language
  - German, English and French are available in the menu functions of the SVC program as standard, and other languages are available on request
- User rights:
  - Groups of people can be assigned individual rights for specific projects. The users are allocated to the corresponding groups.
  - Assignment of rights in relation to data points
  - Increased password security with special characters can be selected
  - Support for UTF8 character sets
- All properties of the BACnet objects can be displayed on the visualisation image of the system (BACnet).
- For each data point, it is possible to display various icons or satellite buttons which can carry out the following actions:
  - Displaying the active BACnet priority
  - Button for resetting the BACnet 8 priority (switching to automatic mode)
  - Icon showing the current object status (BACnet status flags)
  - Links to a quick chart
  - Links to the time programme for the data point
- All images can be displayed during operation on an internet browser (standard or mobile), without having to install a plug-in

BACnet driver

The SAUTER Vision Center is a native BACnet-oriented management level for building automation. Other BACnet-specific technical communication details are compiled in the standardised SAUTER BACnet PICs of the SAUTER Vision Center.

Management console

- The management console is a central web program of the SVC application for:

- Project management
- Licence management
- Maintenance management
- Access to the log file

Alarm and notification management

- SVC manages all process-specific alarms, such as BACnet or OPC messages, as well as SVC-specific alarms and system messages
- The alarm lists can be individually adapted and personalised
- Notification can take place via e-mail, SMS (UMS[1)] Provider) or on a printer
- Alarm events can generate and transfer complete reports
- Alarms can be visualised in plant diagrams, object lists, alarm lists, in the menu bar and via pop-ups
- When an alarm is acknowledged or reset, this is always accompanied by a comment

Alarms statistics are automatically calculated and generated for each alarm.

- The following **alarm types** are available:
  - System alarms generated by the building management system itself
  - Alarms generated by the connected substations
  - Alarms generated by SVC modules such as the energy management module

- The alarm lists can be fully and easily **personalised:**
  - Filter by alarm type (system, module, bus etc.)
  - Filter by alarm priority
  - Filter by BACnet notification class
  - Filter by BACnet objects or data points of every other connected bus
  - Intelligent, automatic filters depending on variable, dynamic parameters
  - Automatic filter by images. This makes it possible to create an alarm list for a particular department or building with just a few clicks.

- For each alarm, it is possible to generate the following **actions**:
  - Sending a configurable e-mail with alarm information
  - Sensing configurable SMS messages with alarm information via e-mail (UMS Provider)
  - Sending predefined reports without any restrictions, so that information is available not only on the consequences of alarms, but also on the causes.
  - Continuous printout of various alarms on continuous stationery printer

- Without any other modification, all alarm lists automatically contain the following data:
  - Current data of the selected filter
  - **Historical** data of the selected filter
  - **Statistical** data connected to the alarm events (Top 5, frequency)

- Depending on the rights of the user, the following functions can be activated from all alarm lists:
  - **Acknowledgement** of all types of change of state, as far as required
  - Adding **comments**
  - Displaying alarm **details**
  - Displaying **historical data** of an alarm
  - Displaying the **statistics** for a particular alarm
  - Downloading a **help document** on the alarm to quickly find out how to solve the problem.
  - Displaying a **quick chart** of the data point affected by the alarm, in order to use the curve to quickly see why and for how long the data point has been affected by the alarm.
  - Displaying all the other objects of the bus or project that are linked to the object.

Audit trail

- User actions are recorded in the audit trail (with date, user name, IP, action description, values)
- Audit trail lists can be individually adapted
- Audit trail documents can be signed with a digital signature

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1) *Unified Messaging Service*

Charts
- All diagrams can be individually adapted
- 3 different diagram modes:
  - Real time
  - Historical
  - Comparison of different periods
- 2 diagram types:
  - Lines
  - Bars
- Up to 16 objects can be displayed for each chart document
- 16 trend curves (objects) can be displayed on 4 diagrams for each chart document
- Each chart document has two display options: Diagram or table
- Quick chart function available without requiring engineering in every list
- All documents can be manually exported as PDF, CSV or e-mail
- All documents can be used in a report

Time programmes / calendars
- Intuitive visualisation of the BACnet-optimised time and calendar functionality.
- BACnet schedule and calendar objects can be read, edited and loaded to the BACnet stations.
- Exceptions of the date, time period or calendar types can be used.
- The interface makes it quick and easy to switch to a graphical view of the time programmes or a list view.
- The interface provides both a graphical and a list view of weekdays and special days.
- For BACnet time programmes, the “time value” is shown in the graph and in the list view.
- Depending on the user rights, it is possible to change all basic configurations to do with the object schedule in BACnet time programmes, such as the “schedule default” or write priority.

Reports
Reports can be generated as follows:
- Manually
- Automatically in conjunction with a calendar
- At the beginning or end of an alarm

When creating reports, it is possible to do the following:
- Print the report out on a printer connected to the system at the time it is generated
- Having generated a report, send it by e-mail to pre-defined persons
- Constant availability of the web interface for downloading

When downloading reports, it is possible to select one or more simultaneously and then download them together in a single ZIP packet.
All documents in the system can be selected as part of a report.
The reports exported by e-mail or saved in the system memory are non-editable PDF documents.

EMM / energy monitoring module
The SVC energy monitoring module enables you to reliably document, analyse and optimise energy use throughout the lifecycle of buildings and properties:
- Recording and monitoring energy consumption
- Determining consumption costs
- Displaying comparative charts for definable periods
- Specific EMM objects and alarms
- Mathematical calculations
- Unit management
- Correction module and offset entries for replacing meters

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