# **SAUTER** software

Management level CASE Suite Produkt och System Information





## **Management level**

### Building and energy management from anywhere at all times.

The latest generation of web-based building management software – SAUTER Vision Center – guarantees optimum system monitoring and continuous operation. Energy management and monitoring modules provide additional benefits for the facility management to ensure optimum, energy-efficient operation of the systems, buildings and premises.

With EMS, SAUTER provides independent energy management software with special functions for energy optimisation and evaluation, as well as company certification in line with ISO 50001 and ISO 50002. SAUTER EMS has interfaces to building management systems that enable energy-relevant data to be used to perform analysis of the energy consumption.



## Management level

| Software                                |   |
|---|---|
| YZP 480495: SAUTER Vision Center        | 5 |
| EMS 100, 200: SAUTER EMS and EMS Mobile | 7 |



### YZP 480...495: SAUTER Vision Center

# SAUTER Vision Center: Central building management and visualisation of decentralised installations

SAUTER Vision Center (SVC) is a web-based building management solution in the HTML5 standard for running and visualising the building operation. SAUTER Vision Center is suitable for both larger single buildings and entire real estate parks or distributed premises. Typical areas of use are office complexes, business parks, college and industrial campuses, airports, railway stations, hospitals or internationally distributed branch networks. The modular concept allows the software to be extended precisely to meet the customer requirements of every installation. Therefore, SAUTER Vision Center gathers all of the data for the entire building and energy management and makes it available to the user from anywhere at all times.

Thanks to SVC's simple and intuitive operation, starting, planning and changing predefined building automation procedures is easy with the scenario manager. This allows users with PC skills to set rooms, for example, to Comfort or ECO mode at precise times and control them via calendar views.

The energy monitoring module integrates energy meters and other data from the buildings to create a comprehensive energy consumption display. Thus, daily, weekly, monthly and annual consumption can be automatically calculated and represented in diagrams. The maintenance module for SAUTER Vision Center is also used for the optimum planning and efficient performance of servicing and FM tasks. Here support is also provided by plant device data capture, the definition of maintenance intervals and the automatic triggering of maintenance cycles based on building management information. This enables complete concentration on the monitoring and evaluation of the installations, as well as their continuous and optimum operation, and contributes to efficient, sustainable building and energy management.

For the integration of different equipment systems, SAUTER Vision Center supports the manufacturer-independent BACnet standard, as well as connection to OPC servers for integrating different protocols in the building automation. In addition to the OPC UA client, the operation as an OPC UA server is also implemented. In order to fully support the integration options, it is also possible to directly connect SAUTER moduWeb Vision via web services and SAUTER novaNet installations. 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. SAUTER Vision Center sends alarms directly via e-mail or SMS to mobile phones according to the responsibilities assigned. With its many user-defined settings and customisable dashboards, SAUTER Vision Center guarantees maximum user convenience.

SAUTER Vision Center can be deployed in virtual IT environments and uses Microsoft SQL databases. These modern architectures and infrastructures enable topics such as high availability, redundancy via cluster systems and corresponding load assignments (provisioning) to be implemented and used.<sup>1)</sup> For the optimal integration of the user structures of a company, it is possible to connect SAUTER Vision Center to an existing LDAP server.

#### **Overview of types**

#### *i* SVC licences and options

| Туре       | Description                                      |
|------------|--|
| YZP480F000 | Provision of all codes in a single ticket        |
| YZP480F200 | Basic licence for 500 addresses with maintenance |
| YZP480F999 | Engineering licence with maintenance             |
| YZP480F099 | Latest version of the DVD                        |
| YZP481F200 | Additional 100 objects with maintenance          |
| YZP481F210 | Additional 1000 objects with maintenance         |



<sup>&</sup>lt;sup>11</sup> Scalable via MS SQL Express up to SQL Enterprise depending on the specified properties, virtual IT environments and high-availability VMware & SQL Enterprise.

| Туре       | Description                                  |
|------------|--|
| YZP481F220 | Additional 10000 objects with maintenance    |
| YZP481F230 | Additional 25000 objects with maintenance    |
| YZP485F201 | Basic energy monitoring with maintenance     |
| YZP485F210 | Maintenance module with software maintenance |
| YZP485F220 | Scenario manager with software maintenance   |
| YZP484F200 | Licence key for VM                           |
| 0900360001 | Hardlock (dongle) for VM                     |
| YZP484F310 | Migration Manager for SVC from nP32 and nPO  |
| YZP487F201 | OPC UA client for SVC with maintenance       |
| YZP487F203 | OPC UA server with maintenance               |
| YZP483F300 | novaNet integration *                        |
| YZP484F400 | Vision Center Studio                         |
| YZP482F101 | Termination of the software maintenance      |
| YZP482F210 | Resumption of the software maintenance       |

★ YZP483F300 novaNet connection requires: YZP487F201



### EMS 100, 200: SAUTER EMS and EMS Mobile

### Transparency and visualisation of energy consumption and $\mbox{CO}_2$ emissions

SAUTER EMS offers all the advantages of a state-of-the-art cloud solution. For example, energy management information can be called up at any time online, and reports can be sent automatically in a variety of formats.

As an alternative, EMS is also available as a licence solution for implementation in an existing IT infrastructure.

To provide an overview for company-wide energy management, maps of the various locations are available so that users can skip directly to the detailed views. These maps can also be defined as alarm overviews. For optimised planning, SAUTER EMS provides forecast functions based on reference curves with calculated past values.

Measurement data is analysed and displayed in standardised reports or on portal pages that are available online and can be called up in a WEB browser via smartphones and tablets (iOS or Android), and via standard PCs and notebooks.

EMS Mobile is a smartphone and tablet app that provides optimised access to alarms and portal pages, as well as the option of manually entering meter readings online.

#### Features

- Energy data managed centrally for centralised and decentralised sites based on measurement data, key figures and reference variables
- EMS Mobile can optimise significantly manual data entry for meter reading rounds, and also ensures the data quality and that the data is available more quickly.
- Forecast functions based on reference curves, past data and formulae, as well as entry of future data point values
- Geographical maps can be assigned to any site, with direct links to detailed information and a general representation of alarms at the sites
- Standard reports for showing measurement data and comprehensive analysis options with scatter and carpet plots, as well as load curves, which are important components and prerequisites for various "Green Building" building certifications as per standards such as LEED, BREEAM, EnEV, MINERGIE, HQE, Green-Calc+, and for ISO 50001 company certification and ISO 50002 / EN 16247 auditing
- Logbook for documenting measures and entering comments and notes, in line with ISO 50001
- Displaying portal elements in external applications, including websites, PowerPoint presentations and Green Building Monitors
- Software Data Connector (SDC), including SSL functionality for building management systems such as novaPro Open, novaPro Enterprise, for SAUTER EMS Energy Data Logger (EDL, listed under "Accessories" for the products and their predecessor models), and for e-mail, SNMP (licence model only) and SQL
- SDC FTP data source for automatic import of CSV, XML, MSCONS and LPEX file formats with definable import interval
- Direct data acquisition (independent of SAUTER) through one or more SAUTER EMS Energy Data Loggers (EDL, listed under "Accessories" for the products and their predecessor models)
- Data acquisition, validation and automatic aggregation to daily, weekly, monthly and yearly values
- Entering and using time-dependent reference variables such as areas, operating and opening times, production times or high- and low-rate times
- Display of measurement data, reference variables and key figures as time series in diagrams for any periods
- Web-based graphic display of energy consumption including the basis for generation of the energy performance certificate
- Web-based graphic energy consumption comparisons with standardised benchmarks
- Optional creation of reports directly using the report module integrated in the SAUTER EMS server
- Automatic sending of reports by e-mail
- Seamless integration into facility management systems<sup>11</sup> Possible as an option with SAUTER EMS server
- Allocation of consumption and costs to internal cost centres and third-party tenants; optional connection of maintenance, CAFM and accounting systems<sup>2</sup>)



- <sup>1)</sup> The development of the function is charged separately.
- <sup>2)</sup> The development of the function is charged separately.

### Technical description

- Alarm management
- Data point management
- Management of measurement data
- Aggregation (compression) of measurement data
- Forecast and reference module
- Comprehensive formula module
- Manual and automatic correction of measurement data
- Presentation of measured values
- Benchmarking
- Standard reporting (daily/weekly/monthly/yearly energy report)
- Creation and automatic export of the reports
- User administration
- Data export and import
- Configurable heating degree days

### Technical data

| Hardware |                                |   |
|----------|--------------------------------|---|
| Induwaic | Processor                      | Dual-Core CPU 64-bit / x64-compati-<br>ble  |
|          | Clock rate                     | > 2 GHz   |
|          | RAM                            | At least 4 GB RAM if the server is be-<br>ing used for EMS on a dedicated basis<br>(2 GB must be used for VMware)   |
|          | Memory capacity                | 40 GB free HDD space for VM parti-<br>tion  |
| Software |                                |   |
|          | Operating system <sup>3)</sup> | VMware ESX(i) Server from 4.0 (rec-<br>ommended) or<br>MS Windows 7 (x64),<br>Windows 8.1 (x64),<br>MS Windows Server 2008 (x64/from<br>standard),<br>Windows Server 2012 (VMware |

Workstation is required for MS OS)

### EMS basic licence packages and user licences

| Description   |
|---|
| Basic system package including 10 data points (DP), 1 simultaneous user, 5 portal clients and an SDC for novaPro Open |
| Basic system package including 10 DP, 1 simultaneous user, 5 portal clients and an SDC for EDL                        |
| Basic system package including 10 DP, 1 simultaneous user, 5 portal clients and an SDC for novaP-<br>ro Web           |
| Basic system package including 10 DP, 1 simultaneous user, 5 portal clients and an SDC for novaP-<br>ro Entreprise    |
| (Sys) 1 additional simultaneous user (local user on EMS server)   |
| (Sys) 5 additional portal clients for accessing EMS Mobile and the Standard EMS Portal                                |
| (Sys) each with 10 EMS DP from 11 to 30 DP  |
| (Sys) each with 10 EMS DP from 31 to 100 DP   |
| (Sys) each with 10 EMS DP from 101 to 200 DP  |
| (Sys) each with 100 EMS DP from 201 to 1000 DP  |
| (Sys) each with 200 EMS DP from 1001 to 2000 DP   |
| (Sys) each with 500 EMS DP from 2001 to 6000 DP   |
|   |

<sup>3)</sup> The SAUTER EMS server is supplied as a virtual machine (VMware).

| Products   |   |
|------------|---|
| EMS110F007 | (Sys) each with 1000 EMS DP from 6001 to 20000 DP   |
| EMS111F008 | (Sys) each with 5000 EMS DP from 20001 to 100000 DP |
| EMS420F001 | (Sys) software maintenance contract (18% per year)  |
| EMS110F999 | Current software on DVD                             |

# Software Data Connector (SDC) options for data acquisition for various BMS, e-mail, FTP, SQL and SNMP systems

| Options    |   |
|------------|---|
| Туре       | Description   |
| EMS140F001 | (Sys) SDC for novaPro Open  |
| EMS140F002 | (Sys) SDC for novaPro Web   |
| EMS140F005 | (Sys) SDC for novaPro Enterprise  |
| EMS140F009 | (Sys) SDC for EDL   |
| EMS140F020 | (Sys) SDC for Generic SQL for 10 data points (DP)                         |
| EMS140F021 | (Sys) SDC for SNMP for 10 DP  |
| EMS140F022 | (Sys) SDC for e-mail (CSV, MSCONS, LPEX) for 10 DP                        |
| EMS140F023 | (Host) SDC for FTP (CSV, XML, MSCONS, LPEX) for 10 DP                     |
| EMS140F025 | (Sys) update DP for SDC e-mail, each with 10 DP from 11 DP to 100 DP      |
| EMS140F026 | (Sys) update DP for SDC e-mail, each with 100 DP from 101 DP to 1000 DP   |
| EMS140F027 | (Sys) update DP for SDC e-mail, each with 1000 DP from 1001 DP to 5000 DP |
| EMS140F028 | (Sys) update DP for SDC SNMP, each with 10 DP from 11 DP to 100 DP        |
| EMS140F029 | (Sys) update DP for SDC SNMP, each with 100 DP from 101 DP to 1000 DP     |
| EMS140F030 | (Sys) update DP for SDC SNMP, each with 1000 DP from 1001 DP to 5000 DP   |
| EMS140F031 | (Sys) update DP for SDC SQL, each with 10 DP from 11 DP to 100 DP         |
| EMS140F032 | (Sys) update DP for SDC SQL, each with 100 DP from 101 DP to 1000 DP      |
| EMS140F033 | (Sys) update DP for SDC SQL, each with 1000 DP from 1001 DP to 5000 DP    |
| EMS140F034 | (Sys) update DP for SDC FTP, each with 10 DP from 11 DP to 100 DP         |
| EMS140F035 | (Sys) update DP for SDC FTP, each with 100 DP from 101 DP to 1000 DP      |
| EMS140F036 | (Sys) update DP for SDC FTP, each with 1000 DP from 1001 DP to 5000 DP    |

### EMS basic hosting packages and user licences

| Products   |  |  |
|------------|--|--|
| Туре       | Description  |  |
| EMS200F001 | Basic hosting package including 10 data points (DP), 1 user and 1 SDC for novaPro Open |  |
| EMS200F002 | Basic hosting package including 10 DP, 1 user and 1 SDC for EDL                        |  |
| EMS200F005 | Basic hosting package including 10 DP, 1 user and 1 SDC for novaPro Web                |  |
| EMS200F006 | Basic hosting package including 10 DP, 1 user and 1 SDC for novaPro Entreprise         |  |
| EMS210F001 | (Host) each with 10 EMS DP from 11 to 30 DP  |  |
| EMS210F002 | (Host) each with 10 EMS DP from 31 to 100 DP   |  |
| EMS210F003 | (Host) each with 10 EMS DP from 101 to 200 DP  |  |
| EMS210F004 | (Host) each with 100 EMS DP from 201 to 1000 DP  |  |
| EMS210F005 | (Host) each with 200 EMS DP from 1001 to 2000 DP                                       |  |
| EMS220F001 | (Host) 1 additional simultaneous user (user access on host)                            |  |
| EMS220F002 | (Host) 5 portal clients for accessing EMS Mobile and the Standard EMS Portal           |  |

✓ Larger numbers of data points for hosting on request.

# Software Data Connector (SDC) options for hosting for data acquisition for various BMS, e-mail, FTP and SQL systems

| Options    |  |
|------------|--|
| Туре       | Description  |
| EMS240F001 | (Host) SDC for novaPro Open                        |
| EMS240F002 | (Host) SDC for novaPro Web                         |
| EMS240F005 | (Host) SDC for novaPro Enterprise                  |
| EMS240F009 | (Host) SDC for EDL                                 |
| EMS240F020 | (Host) SDC for Generic SQL for 10 data points (DP) |

| Options    |  |
|------------|--|
| EMS240F022 | (Host) SDC for e-mail (CSV, XML, MSCONS, LPEX) for 10 DP                   |
| EMS240F023 | (Host) SDC for FTP (CSV, XML, MSCONS, LPEX) for 10 DP                      |
| EMS240F025 | (Host) update DP for SDC e-mail, each with 10 DP from 11 DP to 100 DP      |
| EMS240F026 | (Host) update DP for SDC e-mail, each with 100 DP from 101 DP to 1000 DP   |
| EMS240F027 | (Host) update DP for SDC e-mail, each with 1000 DP from 1001 DP to 5000 DP |
| EMS240F031 | (Host) update DP for SDC SQL, each with 10 DP from 11 DP to 100 DP         |
| EMS240F032 | (Host) update DP for SDC SQL, each with 100 DP from 101 DP to 1000 DP      |
| EMS240F033 | (Host) update DP for SDC SQL, each with 1000 DP from 1001 DP to 5000 DP    |
| EMS240F034 | (Host) update DP for SDC FTP, each with 10 DP from 11 DP to 100 DP         |
| EMS240F035 | (Host) update DP for SDC FTP, each with 100 DP from 101 DP to 1000 DP      |
| EMS240F036 | (Host) update DP for SDC FTP, each with 1000 DP from 1001 DP to 5000 DP    |

### Accessories

| Туре        | Description   |
|-------------|---|
| EDL50F001   | Energy Data Logger 50 for max. 50 DP, incl. M-Bus Master for 25 devices, without software   |
| EDL50F002   | EDL 50/55 software licence for 10 DP each for the EDL50 and EDL 55 GSM models, incl. driver for BACnet/IP, M-Bus and Modbus (IP/RTU), KNX IP                      |
| EDL55F001   | Energy Data Logger 55 GSM for max. 50 DP with GSM module, incl(same as EDL50)   |
| EDL1000F001 | Energy Data Logger 1000 including 10 data points (DP) for data acquisition and drivers for BAC-<br>net/IP, M-Bus and Modbus (IP-RTU), KNX IP and DIN mounting kit |
| EDL1000F002 | EDL 1000 update for each 10 data points (DP) from 11 to 100 DP  |
| EDL1000F003 | EDL 1000 update for each 100 DP from 101 to 1000 DP   |
| EDL1000F004 | EDL 1000 update for each 1000 DP from 1001 to 10000 DP  |
|             |   |

## **SAUTER CASE Suite**

### Project engineering made easy.

SAUTER CASE Suite is used to carry out the technical project processing for both building management systems and conventional control systems. Energy-efficient strategies and methods are already incorporated in the extensive and proven library. Furthermore, SAUTER CASE Suite possesses great flexibility to match the solutions to special circumstances, in order to be able to operate even the most unusual of installations with a great degree of energy efficiency.



SAUTER CASE Suite

VENTILATION

## SAUTER CASE Suite

Engineering

GZS 100, 150: CASE Suite

13

8R



### GZS 100, 150

## GZS 100, 150: CASE Suite

### Features

- Supports the whole process of a project, from the planning stage to the engineering, commissioning and servicing phases
- 'Nerve centre' for the project data and software programs
- Seamless integration of the solution libraries
- Safeguards the workflow between the specialist sub-programs (CASE Builder, CASE Engine, CASE Vision)
- Planning and documentation of the system technology
- Commercial and technical project processing
- Creates the regulation, control and optimisation functions
- Puts the automation stations into service
- Based on the Microsoft Windows operating system
- Multi-lingual program (German, English and French) on DVD
- Licence is required for full use of the program

### Technical data

| System requirements |                                   |  |
|---------------------|-----------------------------------|--|
| Hardware            | Processor                         | Intel 17 (recommended)   |
|                     | Clock rate                        | 2.4 GHz or higher  |
|                     | RAM                               | Min. 4 GB RAM - recommended<br>8 GB RAM  |
|                     | Memory capacity                   | Min. 20 GB free HDD memory space   |
|                     | DVD drive                         | For program installation   |
|                     | Connections                       | USB (operating the VM licence don-<br>gle)<br>Mouse, printer, network  |
| Software            | Operating system                  | MS Windows 7, 8.1, 10 Professional<br>+ Ultimate each (x64)<br>MS Internet Explorer 9.0 or higher<br>MS IIS (Internet Information Services)<br>installed |
|                     | Additional software <sup>1)</sup> | MS Office 2010 (32-bit)<br>Graphics program [CorelDRAW<br>GraphicSuite: 32-bit: X4, X5, X6, X7;<br>32/64-bit: X8, 2017, 2018]                            |

### **Overview of types**

*i* All licences delivered without CASE Suite application software

| Туре       | Description  |
|------------|--|
| GZS150F010 | CASE Suite Enterprise licence with maintenance [annual fees] |
| GZS150F011 | CASE Suite Enterprise licence, excluding maintenance         |
| GZS150F020 | CASE Suite Enterprise time licence                           |
| GZS150F021 | CASE Suite Partner time licence                              |
| GZS150F022 | CASE Suite Designer time licence                             |
| GZS100F699 | CASE Suite DVD, latest version                               |

| Accessories |             |
|-------------|-------------|
| Туре        | Description |
| 0900360001  | Hardlock VM |



<sup>&</sup>lt;sup>1)</sup> To be able to use all the functions of CASE Suite Enterprise, we recommend installing the following software.

Systems

Components

**Services** 

**Facility Services** 



SAUTER – your local partner.