YZP410…431: novaPro Open Suite

Improving your energy efficiency

Thanks to the management level, you can gain an overview of energy and media consumption so that you can take targeted measures to improve efficiency. The effectiveness of the measures taken can be verified immediately due to historical data recording.

Usage areas

Management level for complex installations and system integration. Enables horizontal integration of various different sub-processes in a building, provides an excellent window to the technical processes and makes information available – locally or worldwide – using the web technology that is included in the basic package.

Characteristics

- More than 100 drivers for linking up to non-Sauter systems
- Linking to databases via ODBC, DDE, SQL, OPC
- Thanks to scalability and modularity, adaptable to the particular requirements of a plant
- Extended alarm management facility permits reporting of events via SMS, e-mail, fax or voice-mail
- Using the integrated time planner, it is possible to organise the duty personnel who are called out when an alarm occurs
- Tools for CASE Suite and project management

Technical description (novaPro Open Suite basic package)

- Visualisation
- Scheduler
- Driver für EY3600 novaNet
- 5 Web Clients
- Report generator
- PLC funktionality
- OPC-Server and OPC-Client
- ZP3600, ZP2400, BACnet Scheduler

Technical description (novaPro Open Suite runtime)

- Runtime (no Studio)
- 300 Tags
- 1 web client
- 1 driver (3600 or BACnet – subject to a charge)
- PLC functionality
- All drivers and OPC included free of charge
- ZP3600 and ZP2400

Products

Type	Description
novaPro Open Suite basic package	
YZP410F001	Basic package including 500 addresses
YZP410F101	Basic package including 2000 addresses
YZP410F201	Basic package including 5000 addresses
YZP410F301	Basic package including 65000 addresses
novaPro Open Suite runtime	
YZP411F001	Runtime with novaNet driver
YZP411F002	Runtime with BACnet driver
YZP419F001	Upgrade for basic package including. 500 Adresses (YZP410F001)

Options

Type	Description
YZP416F101	EY2400 driver
YZP416F201	EY3600 driver for Wizcon included in YZP 410 F . . .
YZP416F302	Driver, Johnson Controls System 91, N2 protocol
YZP416F303	Driver, Landis & Gyr PRV1 controller
YZP416F304	Driver, Landis & Gyr PRV2 controller
YZP416F311	Driver native BACnet (vpiwnbcn.dll)
YZP416F312	Driver Siemens SIMATIC S5 / S7, TCP/IP (vpiwnstp)

Options (continued)

Type	Description
YZP417F101	Access for 10 web clients
YZP417F201	Access for 20 web clients
YZP417F301	Access for 100 web clients
YZP418F001	AAM - advanced alarm module [1]
YZP418F201	RealSpeak™
YZP419F101	Upgrade from 500 to 2000 addresses
YZP419F201	Upgrade from 2000 to 5000 addresses
YZP419F301	Upgrade from 5000 to 65000 addresses
YZP420F003	Version update: previous version to latest version
YZP420F004	Version update: older version to latest version
YZP420F999	novaPro Open Suite: latest CD
YZP421F002	novaPLC Upgrade from 500 to 65000 addresses
YZP422F001	Exchange parallel dongle by USB
YZP423F001	XL Report
YZP425F001	eToken PKI Client licence
YZP425F002	eToken USB 32K
YZP425F003	eToken USB 64K
YZP426F001	Biometry PID Enrolment licence
YZP426F002	Biometry PID Verification licence
YZP427F001	FPS Single Flat Silicon USB
YZP427F002	FPS Single Flat Optical USB Desktop
YZP427F003	FPS Single Flat Optical USB Kiosk
YZP427F004	FPS Single Flat Optical Ethernet
YZP427F005	FPS Single Flat Optical FBI USB
YZP427F006	FPS Single Flat/Rolled Optical FBI USB
YZP428F001	WizLogger
YZP429F001	WizAudit
YZP430F001	LDAPE Enrolment licence
YZP430F002	LDAPV Verification licence
YZP431F001	Licence PDA per web client (JVM)

1) Alarms can be sent as SMS, e-mail or fax. Time planner for organising duty personnel.

Accessories

Type	Description
EY-BU292	moduNet 292 (see PDS 96.015)
EYZ291	novaNet 291 novaNet-Router (see PDS 96.691)
EYZ485	V.24/EY2400 DL-Converter (see PDS 96.210)

novaPro Open ideally unites SCADA (supervision control and data acquisition) and the internet. Together with CASE Suite, novaPro Open Suite also contains all the programs you require for developing a complete building automation solution.

Under Microsoft Windows XP / Win7 / 2003 Server / 2008 Servver, **novaPro Open** provides the user with full SCADA/HMI functionality. In addition, all information can be viewed and edited using a standard web browser on either an intranet or the internet.

Data acquisition

For communicating with devices of the automation level, there are drivers for Sauter's building management systems BACnet and EY3600, plus more than 100 drivers for incorporating non-Sauter systems. OPC DA 2.0 server and client functionality enable data to be exchanged with many other systems. ODBC database access and DDE functionality permit the exchange of data with superior systems or simply the saving of process data in standard databases. For each novaPro Open work-station, up to 32 communication drivers can be incorporated at the same time.

Depending on the bus protocol, novaPro Open's communication drivers support either the event-orientated refreshing or the polling of process data. With Sauter's EY3600 and EY2400 building management systems and BACnet, both polling and event controlled refreshing of process data are sup-ported. novaPro Open enables polling of data points up to a resolution of 30 ms. The actual resolu-tion depends on the type and capacity of the connected automation network.

Up to 65,000 data points can be edited using novaPro Open. A differentiation is made between hard-ware data points and soft data points. All data points captured via a communication driver (e.g. EY2400, EY3600, OPC, BACnet etc.) are hardware data points. Local data points (dummy tags) and data points that are captured by another novaPro Open station via the local network are soft data points. When choosing the required program licence, only the hardware data points have to be taken into account. Soft data points are included in every licence.

<u>Example: Choosing the right licence</u>
In a project with one EY3600 and one EY2400 automation net-work, e.g. two PDMs (process data managers, i.e. novaPro Open stations for capturing data) are used. The first station captures 2000 EY3600 data points, the second station 500 EY2400 data points. In this case, one novaPro Open licence for 2000 addresses is needed for station 1 (YZP410F101 basic package including 2000 addresses). Station 2 requires one novaPro Open licence for 500 addresses (YZP410F001 basic package including 500 ad-dresses). Each station can access the data points of the other station via the network, without these network data points being counted when working out the required licence.

Historical data archiving

All process data captured with novaPro Open can be recorded and historically saved, making them available for future analysis. Process data and alarms can be recorded with a maximum time-stamp resolution of 1 ms. The alarms can be stored on the hard drive. Thanks to ODBC, the current process data can also be recorded direct in an existing ODBC-capable database.

All novaPro Open components, trends, reports etc. access these files.The separate historical re-cording of alarms and process data in separate files enables the data to be more easily analysed and statistically evaluated. If the process data are historically recorded direct on the automation level, the time stamp of the automation stations can be adopted when the data are read in.Thanks to the Re-Play function, process values recorded in the historical data-base can be shown in pictures. As with a video-recorder, you turn back the time and see the status of the plant at the chosen time.

Open architecture

novaPro Open has extensive tools for exchanging data with other programs. **novaPro Open** supports the standard DDE (dynamic data exchange) functions and block DDE functions as both client and server. The SQL module is a highly flexible means of linking with the most common standard databases via the Microsoft ODBC interface. This simplifies the configuration of data exchange with other applications and databases, such as Microsoft SQL server, Sybase, Oracle, etc. By means of event-led SQL or ODBC interrogation, data can be read from existing databases, and real-time data or historical data can be written into databases (e.g. transfer of current counter readings to ERP systems).

Data can also be transferred to SAUTER EMS.

Biometry-based authentication

This feature enables the customer to replace or enhance the standard login/password authentication method by using biometric (fingerprint) information. This new functionality enhances overall security of your novaPro Open installations.

This function enables enrolment of users fingerprints, and user authentication (1-1 and 1-n) using body specificities.
- 1-1 or authentication process is an operation that consists in validating a user login with a fingerprint.
- 1-n or identification process is an operation that consists in identifying a user thanks to his fingerprint.

To set up biometric login, you just have to select the biometric device you want to use on this station (from the user management properties page). All available scanners are listed in the combo box; select the device installed on your computer. Check with your commercial representative for more information on installing the scanners that you need.

You also have the possibility to choose between two different login strategies:

- 1-to-many or Identification: if you choose this strategy, biometric information is used to confirm your identity and, if available, your account.
- 1-to-1 or Authentication: if you choose this strategy, the login flow remains as usual except that, to finalize your login with a specific account, you have to provide biometric information that matches with account you are trying to login with.

For full details of how to enrol and identify a user, please refer to the appropriate chapter in the user guide. Note that separate license models are available:

1. An enrolment license. A novaPro Open station with this option enabled, will allow a novaPro Open administrator to enroll users (record their information in the system) and to login to the system.
2. A verification license. In this case, the user cannot be enrolled (added to the system), but will be able to login to novaPro Open.

Please see your commercial contact to discuss your license requirements.
Note that biometric login to a novaPro Open station is not available via the web interface.

Login to novaPro Open using Smartcards

novaPro Open 4.1 allows the user to import users from Active Directory (AD) into novaPro Open so that the IT infrastructure is in charge of user authentication for the imported users. And gives the abil-ity to allow the users imported from AD to login using smart-cards.

Smartcard authentication, simply put, allows novaPro Open users that have been imported from an Active Directory (that supports smart card login) to login into novaPro Open using their smart-cards. The user will be logged out of novaPro Open when the smart-card is removed.

Smart card authentication is handled natively by Windows and novaPro Open takes advantage of this support.
Note that this functionality will also be available via the Web interface.

In order to perform login at a novaPro Open station, it must have the eToken RTE installed and net-work access to the Domain Controller (DC). (Option: YZP425F001)

During login to a novaPro Open station, the user will insert the smartcard when requested and must enter his pin code. User is

then authenticated against the smartcard. The smartcard user certificate delivered during enrolment can be retrieved and authenticated against the DC.

HMI (human-machine interface)

novaPro Open has all the tools that you need to create an effective user interface and a monitoring application. The productivity in engineering is reinforced by the integrated development environment. Configuration changes can be made online, and their effects can be seen immediately.
From the **novaPro Open** Studio, you can call up all tools for generating schematics, database inquiries, diagrams, analyses, recipes, protocols etc.

Schematics

novaPro Open has a powerful drawing tool for making schematics, which allow the user an insight into the process. A schematic comprises dynamic objects, alarm objects or text. Up to 10,000 dynamic objects can be positioned in a single schematic.
Properties of dynamic objects

- two-dimensional movement
- scaling (object changes size as a function of a process value)
- fill with pattern or colour
- rotate
- flash
- show/hide
- etc.

For any object, you can choose to display the tag name used by the object, the tags'discription, ect. At runtime, simply hover the mouse over the object to see the required information.

Properties of alarm objects:

- Object changes status as a function of the alarm status: flash, change colour, show, hide etc.

Using the TagContext function, data points from several AS groups can be visualised in a single schematic; i.e. if you wish to view several similar rooms, only one schematic has to be made. By selecting a context, the process values of the desired room can be displayed.
With trigger objects, you can initiate any pre-defined actions: assign a certain value to a data point, change the schematic, call up another zone of a schematic etc.
A genuine zoom function of up to 2048 steps enables the portrayal of details from an overview. Use the various levels (up to 64) of a schematic to show/hide objects in a schematic, depending on the zoom level and the user rights.
The cluster library provides numerous pre-defined graphic elements. A cluster comprises the graphic and the stored properties (dynamic transformation, alarm definition, trigger properties, assigned data points).

Event window /Alarm list

novaPro Open shows alarms in a special window – the event window. Alarms can be shown in a pop-up window as they occur, before all other applications that are currently running on the computer. This keeps the user fully informed of any new event or new alarm. You can configure several event windows which differ in the chosen alarm class, family, weighting etc. Less important messages can be suppressed for certain users.
In an event window, alarms can be viewed in both online mode (only active alarms are carried out) and historical mode (historical presentation of past alarms, messages).Indication occurs throughout the network, i.e. an alarm generated on one station can be shown at the same time on all stations in the network. All event windows are saved automatically in a web capable format and can, therefore, also be visualised and operated using a standard web browser.

Charts / Trends

Up to 16 data points can be presented graphically at the same time in a chart window. You can choose between: (a) online mode, in which the current process values are presented graphically; and (b) historical mode, in which previously recorded data points are shown. The axis scale can be set individually for every data point: you can choose between a linear or a logarithmic scale. The time resolution is up to 10 milliseconds. Mutual dependency of data points can be visualised with the X/Y presentation, which allows you to view a novaPro Open data point as a function of another data point. All charts are saved automatically in a web capable format and can, therefore, also be visual-ised and operated using a standard web browser. The trends displayed in a web browser can be exported locally as a CSV file for further analysis.

Multi-language capability

The multi-language capability of **novaPro Open** lets the data-point text, alarm text and text fields of a schematic be exported into an ASCII file. This easy-to-use file can be translated into another language and then re-imported into **novaPro Open**. A user can now choose his language during run-time.

Recipe management

Recipes are pre-defined process data which describe a status, a starting condition or, for instance, a set of setpoints. With novaPro Open's recipe management, you can define recipe models and man-age a collection of recipes for each model. You can use this function to (e.g.) define setpoint profiles. A setpoint profile can be made up of any parameters or setpoints. Recipe management allows the user to prepare and save any amount of parameter sets. You can load (as and when required) one of these prepared recipes and set all parameters defined therein to the chosen values.

Protocols / Reports

With the integrated protocol function, the user can call up and print out reports (freely configured to his needs) either as and when required or periodically. With the aid of reports, you can display and statis-tically analyse historical data.
So called HTML – Templates allow the generation of powerful reports that can be either in a web browser or be stored as a file on the disc.
Generate professional Excel-based reports with help of option XL-Reports. The reports can be event triggered or executed timecontrolled. The reports generated can be printed or viewed and saved as PDF or HTML-File.

Network capability

The scalability of novaPro Open enables the continuous expansion of a stand-alone operator station (OS) into a system-wide network. The network capability automatically detects all outlying no-vaPro Open stations in a network with TCP/IP or NetBios. Thanks to the concept of distributed databases, all novaPro Open stations in the network can be used as a database server and as a client. Authorised users can access all data points and alarms from an outlying network operating station. For example: an alarm generated on an novaPro Open station can be confirmed by any other station without any extra effort.
Data exchange between the various novaPro Open modules (local or throughout a network) is event-orientated. In so doing, the server sends only new or amended data to the clients that need these data. Event-controlled communication permits high system performance when the loading of the processor and the bandwidth is low.

Occupied ports in a TCP/IP network

Port	Description
3025 UDP	broadcast receiver
3024 TCP	listen port for stations connection
3026 TCP	listen port for broadcast to/from another subnet
3028 TCP	internet Server
3029	Network Application Update

Web technology

novaPro Open can be linked with any standard web server in order to publish the plant information in an intranet or on the internet. This makes it easy for novaPro Open to be integrated into an existing intranet infrastructure, or for it to use the standard Windows web server for stand-alone applications. This is achieved by the use of Java Applets, which are responsible for the presentation of the data-base created by novaPro Open and the editing of the online data. Schematics, diagrams (trends), event windows (alarm lists) are automatically saved in Java while the system is being configured, and can be edited with the aid of a standard web browser (e.g. Microsoft Internet Explorer 5.5).

The basic packages of novaPro Open support up to 5 simultaneous web clients, i.e. outlying operat-ing stations with standard web browser.

Occupied ports

80	http: browser inquiry; transmission of HTML page
3028	data link from the web server to the Java Applet on the client machine (configurable)

In extensive networks and in connection with the internet, the installation of a firewall is recommended. Components (hardware and software) needed for this are not supplied with **novaPro Open**. Dank der Bedien- und Eingabemöglichkeit via Softtastatur Because it is possible to enter operating and input commands via 'soft' keyboard (virtual keyboard), **novaPro Open** is particularly suitable for use on PCs with touch-screen but no keyboard.

Reporting system

The reporting system of novaPro Open enables the user to differentiate between up to 16 alarm classes and alarm priorities between 1 and 50'000. Alarms can be received and processed by all novaPro Open stations in the network. Apart from self-defined alarms, there are system-specific alarms, such as 'Hard disk full', 'Communication error', 'False gate values', 'Printer not ready' etc. Alarms are reported and saved with a time-stamp resolution of up to 1 ms.

As standard, novaPro Open permits the following media for issuing alarms: event window, pop-up, alarm object, network-wide message, historical file, ASCII file and alarm printer.

Any number of printers installed under Windows can be used as alarm and/or report printers. Alarms can – on the basis of their properties – be automatically forwarded to associated printers. In so doing, it is possible to colour them differently with regard to priority and weighting.

Using the Advanced Alarm Module (YZP418F001), which is available as an option, alarms can be sent as a fax, an e-mail, an SMS or a pager signal. The integrated time planner enables the user to organise duty personnel groups who are called out when an alarm occurs.

The RealSpeak™ (YZP418F201) option from novaPro Open version 4.1 onwards also allows voice mail to be sent to any telephone.

User management & system security

The security and access control of novaPro Open is effected by issuing rights to users and groups. Authentication is on the basis of user name and password. novaPro Open manages an unlimited number of users and groups. By assigning users to groups, you are issuing rights (authorisation) concerning the configuration and operation of the systems. It is now possible to grant or revoke access to a station for a specific user or group. By default, each new station is accessible to every user.

All menu items in novaPro Open can be enabled or disabled, depending on the user or group. By installing the system security, you can enable or disable access to system functions – such as Alt-Tab, Ctrl-Alt-Delete, Alt-Esc etc. – for the novaPro Open uers/groups.In summary, a novaPro Open workstation can be matched exactly to the requirements of its users.

Requirements according to FDA21 CFR Part 11 can be fulfilled thanks to the functionalities such as "strong password Manage-ment" and password aging and the shift management that can be config-ured through a graphical interface.

novaPro Open enables the integration of a local user database based on Microsoft Access, and also provides access to a Microsoft SQL-based central database for managing the users and their rights.

For greater security, it is also possible to download an LDAP (AD) user database and integrate it as an nPO user database.

Native BACnet Driver (YZP416F311)

The integrated BACnet connectivity comes with a powerful configuration console that gives the follow-ing options:

- Browse all connected devices, the data objects within and their properties.
- Time synchronisation. Align date and time on all devices and the local PC.
- Define mapping rules that determine how novaPro Open will handle alarms coming from   BACnet devices.
- Convert historical data from BACnet „Trend log"objects into novaProOpen historical data
- Configure BACnet networks. Define witch network will be monitored. Do this manually or   through the use of a novaPro Open digital tag.
- The VPIWNBCN driver and all its BACnet functionalities are based on BACstack 6 protocols. It allows communicating with distributed control systems across BACnet networks.
- Thanks to the number based addressing mode, the user gets access to any abstract BACnet   object.
- The name based addressing mode allows an easy understand-able access to the BACnet objects

Audit Trail

To comply with FDA 21CFR Part 11 security standards, novaPro Open Audit Trail has been en-hanced, and the number of traceable actions has been quadrupled:

User actions

- Changing tag value.
- Running a macro.
- Going to a zone.
- Login into novaPro Open.
- Logout of novaPro Open.
- Locking a tag.
- Unlocking a tag.
- Changing lock tag value.
- Synchronizing time between novaPro Open stations.

Group management actions

- Create a group.
- Delete a group.
- Changing group description.
- Changing minimum password length.
- Changing shift group status.
- Changing Alert group status.
- Adding a user to a group.
- Removing a user from a group.
- Changing group admin.

User management actions

- Creating a user.
- Deleting a user.
- Changing a user password.
- Changing a user description.
- Changing a user full name.
- Changing a user layout.
- Changing a user password rights.
- Changing a user web rights.
- Changing user rights to modify its personal information.
- Changing user password expiration.
- Changing user must enter password.
- Changing user address.
- Changing user comment.
- Changing user pin.
- Changing backup user.

Optimised application development

Within the development studio, there is a new tab via which user-defined objects can be viewed (the objects can be created by the user himself or imported from other applications). By clicking an object type, the user gains access to a list containing the objects available within the application. A user-defined object may contain the properties of many different types, ranging from simple character strings to tags or other user-defined objects. Furthermore, arrays of each one of these types can be used. It is also possible to add objects or any of their properties.

This is a completely flexible solution that provides a clear model for creating applications. Once the objects have been created, they can be re-used in other applications via an export/import function.

Display of novaPro Open windows on PDA or smart phone

This feature enables the end user to use his novaPro Open applications anywhere on any of the following:
- PDA via WLAN
- PDA via Bluetooth (where applicable)
- PDA via GPRS
- Smart phone

Therefore, practically all available operations can also be used on a PDA:

- Image with operation
- Event summary
- Chart (diagram)

This is made possible by the 'thin client packer'. Using this integrated tool, the user can choose all the components that he wishes to make available.
The choice of components leads to the creation of a compressed PDA application. This can also be downloaded from the web server.
Once the compressed application has been copied onto the PDA, the user is able to:
- start it as a further PDA application
- log himself in to the application program
- issue to himself all of the components that are available on the PDA
- select a component
- view this component on the PDA
- navigate between components

Requirements:
The WinCE/PocketPC-compatible handheld should fulfil the following minimum requirements, those of CrE-ME JVM:

PDA list (HTC brand)

- HTC P6500
- HTC Touch, Touch2, Touch HD (Win 6.1 or Win 6.5)
- HTC Diamond, Diamond2 (Win Mobile 6.1 or Win 6.5)

novaPLC CoDeSys V 2.3

novaPLC is an open, standardised soft-PLC solution for Windows. novaPLC meets the IEC 61131-3 standard and supports the following six programming languages: Instruction List, Structured Text, Function Block Diagram, Ladder Diagram, Sequential Function Chart, Continuous Flow Chart. no-vaPro Open and novaPLC access the same databases so, using novaPLC, you have the possibility of effecting calculations, logical functions, control algorithms etc. with novaPro Open data points.

novaPLC provides you with all the tools that you need for creating a powerful, PC-based control system. These tools include Trace, Debug, Simulation etc. The debugging functions facilitate troubleshooting. You can set break points in your program and analyse the status of all variables, data points at the time of the interruption. In simulation mode, you can run the program without reading process-data inputs and writing process-data outputs. All online functions can be used to the full in this mode.

This enables you to carry out almost a complete test of the programmed application without the associated hardware. Thanks to novaPLC, the serviceable life of the existing investments (e.g. Sauter EY2400) can be increased and, together with upgrades, be integrated with the EY3600 system and BACnet into the management level. All applications created with novaPLC are networkable and can be operated by other novaPro Open stations throughout the network. The integrated function library includes mathematical, string, counter and timer functions, plus numerous control and system functions.

novaScheduler

novaScheduler is a novaPro Open module that enables you to plan and carry out operations in accordance with a time programme. The calendar-like user interface provides an intuitive and fast method of planning on-off or recurring operations over the course of a year. novaScheduler has full web capability, i.e. the program can be both configured and operated using a standard web browser.
Operations supported by novaScheduler

Vom novaScheduler unterstützte Aktionen:

- Value assignment to data points; execution of switching operations
- Running novaPro Open macros
- Hard-disk operations (creating and deleting folders and files; moving and copying files etc.)
- System operations (starting a non-Sauter program, e.g. back-up programs etc.)

novaScheduler for BACnet

As a complement to the novaScheduler functionalities, such as configuration and execution of PC based time programs, novaScheduler for BACnet lets you create, delete and configure BACnet Schedule and Calendar objects on connected BACnet devices. BACnet and PC based time programs can be configured through a uniform control interface with help of a standard Web-browser.

novaPro Open Suite Runtime

novaPro Open Suite Runtime is the perfect solution for a small system with a driver and less than 300 tags

Applications are developed with a Studio.

If the application starts with the Runtime dongle, Studio will not be available. The customer uses a customised application with pictures, event journal, web etc.

If changes need to be made during the life cycle of the application, they can be performed in demo mode (2 hours) or using a standard dongle.

ecosFlex

Thanks to the SAUTER ecosFlex add-on, flexible room layout with ecos devices can now be managed directly on an nPO schematic.

PC requirements

Processor	Dual-core processor with at least 2.1 GHz
	N.B.: novaPro Open 4.1 also supports multi-processor architectures and chipsets with hyperthread technology.
RAM	1 GB RAM (2 GB RAM recommended)
Hard drive	at least 2 GB free memory space (recommended: 40 GB)
DVD drive	for installation
Interfaces	1 mouse
	serial RS-232
	1 network connection
	1 USB port for dongle
Operating system	• Windows 2008 Server R2, (multilingual, 64-bit version) • Windows 2003 Server R2 SP1, (multilingual, 32-bit version) • Windows 7 with at least SP1, (multilingual, 32-bit version) • Windows 7 with at least SP1, (multilingual, 64-bit version) • Windows XP with at least SP3, (multilingual, 32-bit version)
Web browser	Microsoft Internet Explorer 8.0 SP 1 or 9.0 and virtual machine (Java)
Java-compatible browser	SUN JAVA plug-in version 1.6.0.25 (or above)
Web server	Microsoft IIS (Internet Information Server) version 5.1 or above
Graphic card	512 MB RAM (1 GB recommended)
Mouse	Any mouse for PC
Monitor resolution	1920 × 1200
TCP/IP config.	IP address can be permanently assigned or allocated by a DHCP server dynamically.

Application example
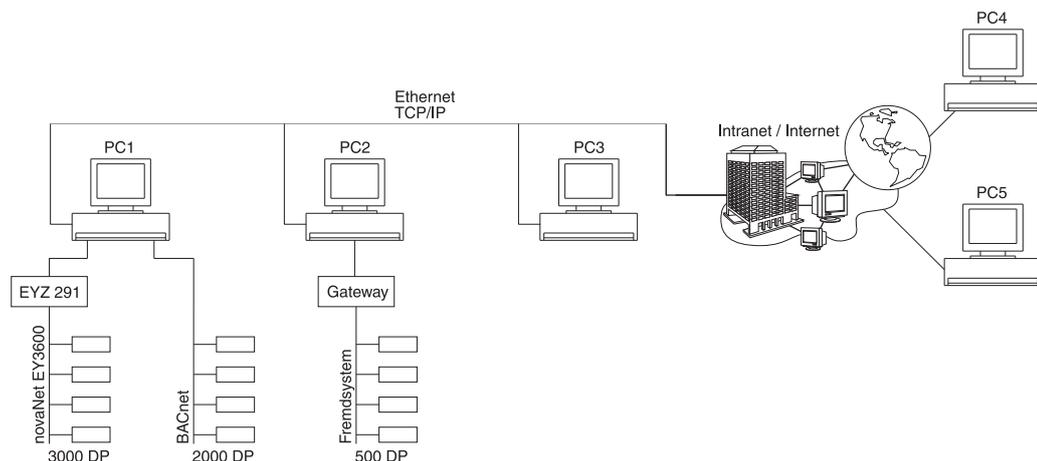
PC 1	**PC 2**	**PC 3**	**PC 4 / PC 5**
Process Data Manager (PDM 10) with link to a novaNet EY3600 and an EY2400 data line	Process Data Manager (PDM 20) with link to a non-Sauter system (e.g. LON)	Operating Station (OS 30), alarm centre	Web operating stations

Licences required

	Function	YZP410F001 Basic package: 500 addresses	YZP410F101 Basic package: 2000 addresses	YZP410F201 Basic package: 5000 addresses	YZP410F301 Basic package: 65000 addresses	Included in the basic licence: Treiber EY3600	YZP416F311 Driver for native BACnet	YZP418F001 Advanced alarm module	Bemerkungen
PC 1	PDM			x		x	x		
PC 2	PDM	x							Driver for non-Sauter system on request
PC 3	OS	x						x	Network operating station with central alarm management
PC 4	Web								Only a Java-capable browser (e.g. Internet Explorer 8.0 or 9.0). A web server, e.g. IIS 7.0, must be installed on one of the network stations (PC1 to PC3). Devices and
PC 5	Web								software needed for connect-ing to the internet, such as a fire-wall or a proxy server etc., are not included here