



The 360°
Automation and
Control System
Platform

Building Automation
Building Control
Energy Management

versatile – future-proof – hardware independent

evon XAMControl



evon XAMControl is a hardware-independent automation platform for buildings that merges efficiency, versatility, and comfort with investment stability for planners, system integrators and building operators.

Today's modern building automation systems need to fulfil a variety of requirements. Our powerful software platform enables the easy automation of your process, measuring and control technology, as well as the integration of 3rd party equipment from different suppliers.

Building management with evon XAMControl

As a building management system, the function of evon XAMControl is to network all manner of real estate whether they are new or existing buildings. As a centralized and open system, it integrates all utilities and offers numerous interfaces to third-party systems and is certified according to BACnet (B-BC, BAWS).



evon XAMControl



Innovative Visualization, Easy-to-use, and all the evon XAMControl Advantages

The visualization in evon XAMControl guarantees a fast and clear overview of all utilities and buildings. All parameters, settings, demand values, and operator interventions are documented in the database and are available for evaluation. Other advantages of evon XAMControl are:

- Central database
- Client-server architecture → Redundancy/ Hot-standby (high level of availability)
- Access rights via user administration
- Data recording and data evaluation (reporting, benchmarking)
- Notification via SMS & e-mail
- Trends
- Help desk for installation and maintenance
- Web visualization (operation via tablet, smartphone)
- Document management, e-plan-integration

Every Variation of Building Management

The same is true for the networking of existing buildings, new buildings, or refurbishments: The numerous interfaces, the integration of 3rd party suppliers, and the integration of all components enables central management of all buildings. This makes operating the system (standardized user interface) and managing the facility considerably easier.

Open to Numerous 3rd Party Systems

The evon ACC Store is a library of completed and tested components (objects, macros, and templates). These include a series of components for the integration of products from 3rd party suppliers such as Siemens, Honeywell, Johnson, Sauter, ABB, Schneider, Delta Controls, etc. The ACC Store is supplemented with the established interfaces from building management (BACnet, OPC, OPC UA, Modbus TCP, REST, MQTT, SNMP, KNX/EIB, Simatic S7, etc.).

BACnet Certified

BACnet is an international standard (EN ISO 16484-5) in the field of building automation. The integration in evon XAMControl on the control side (BACnet B-BC) complies with Revision 14 and includes several useful functions. The implementation of the BACnet Advanced Operator Workstation in accordance with Revision 18 ensures full compatibility with AMEV MBE-B.

BIM Integration in evon XAMControl

evon XAMControl combines all utilities and 3rd parties in a single system: From heating, ventilation, aircon and sanitation, via lighting and room automation, to safety equipment such as fire alarm systems, access control, video cameras, and movement detectors.

Consistent and Easy Programming Thanks to evon's 5-Step Engineering

The efficient and easy programming of evon XAMControl is supplemented with numerous interfaces to all established and 3rd party suppliers (Beckhoff, WAGO, Siemens, B&R, Phoenix Contact, EAP, etc.). In addition, standard IP and BUS couplings are available to control data points (DI/DO, AI/AO) and interfaces to all established standards (BACnet, Modbus RTU, Modbus TCP, M-Bus, KNX/EIB, OPC UA, DALI, SMI, MP-Bus, EnOcean, etc.).

evon XAMControl Engineering

One of evon XAMControl's greatest strengths is the aspect of engineering. The 5-step Engineering and Solution Importer tools provide you with the ability to save time and hence significantly reduce project duration. The basis for the automatic import can be data from a range of planning tools such as TRIC, WS-CAD, E-PLAN, etc.

evon XAMControl ACC Store

Not wanting to reinvent the wheel, we came up with the idea of the ACC Store. This is where you can find completed and tested libraries for a range of applications. Your advantage: You can be more efficient and cost-effective when implementing your project by reducing manpower effort and can rely instead of tried and proven quality. If you wish to administer your own proprietary libraries, an individual and protected user area can be made available.

More Details Thanks to Document Management and Electrical Plan Integration

The comprehensive document management function in evon XAMControl ensures that each item of important information is also immediately accessible. This not only helps during commissioning but also during live operation and for maintenance. evon XAMControl enables you to establish a fast and targeted link between the visualization object and the electrical plan.

evon XAMControl Help Desk

evon XAMControl offers you an integrated help desk. The main focus is on commissioning and live operation. During commissioning, the system provides support with comprehensive documentation and to-do lists including status and time plan. During maintenance, all important events are displayed and can be allocated to team members. Open interfaces enable ERP or FM systems to be easily connected.

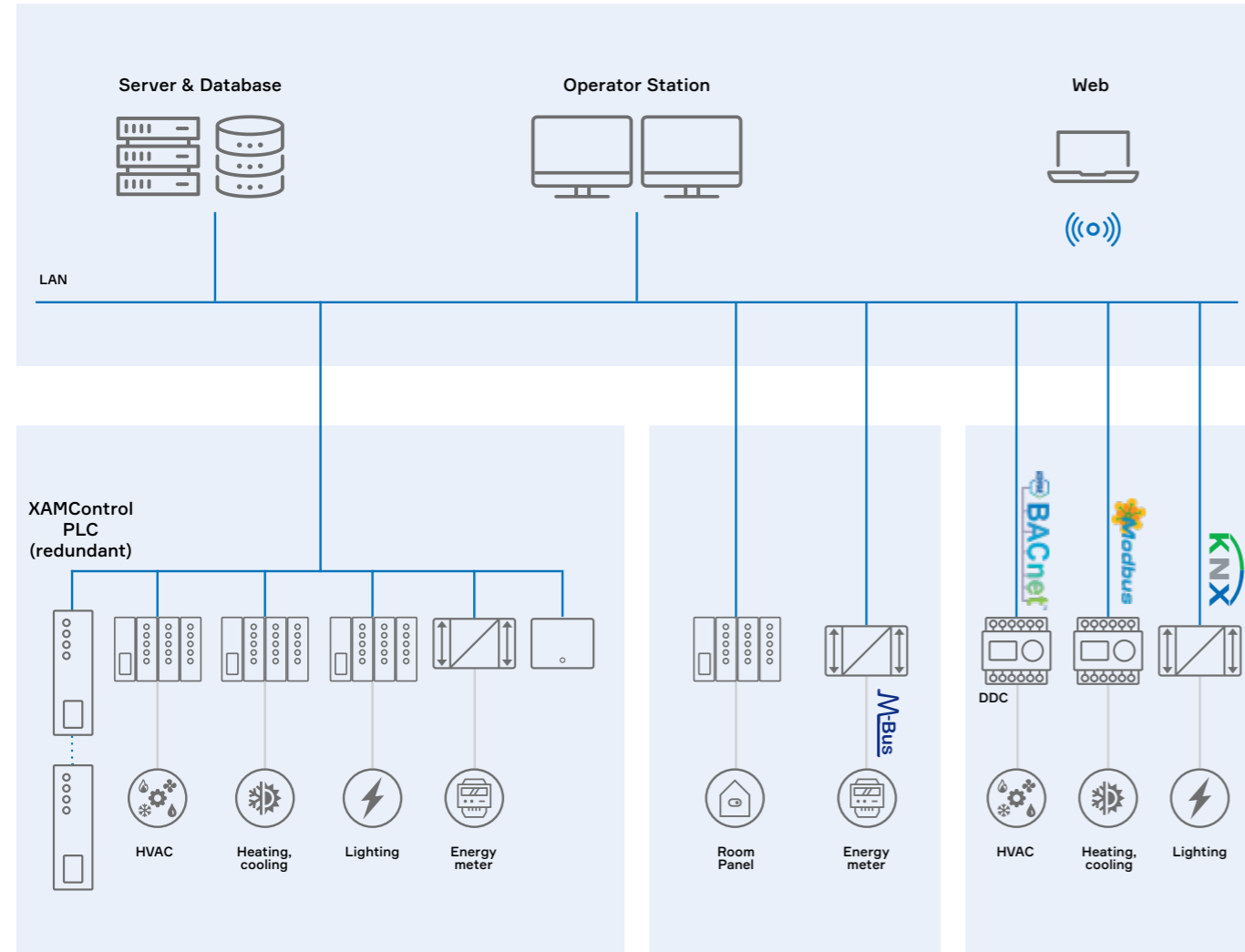
Smarter Thanks to Web Visualization and QR Code

A further feature in evon XAMControl is the use of QR codes. You can easily produce these codes yourself and mount them on any component. Then, for example, simply scan the appropriate QR code during maintenance and you will immediately see the component's status directly in the visualization including any possibly required maintenance actions. QR codes can also be used in booking workplaces and in time acquisition. One quick scan and the employee is checked in and the workplace appears as occupied.

System Topology Overview

Building Automation

Control Centre



evon XAMControl overall solution

evon XAMControl direkte Integration

Integration of 3rd party systems

Solution Server including operating station and a controller per floor with decentralized IO racks

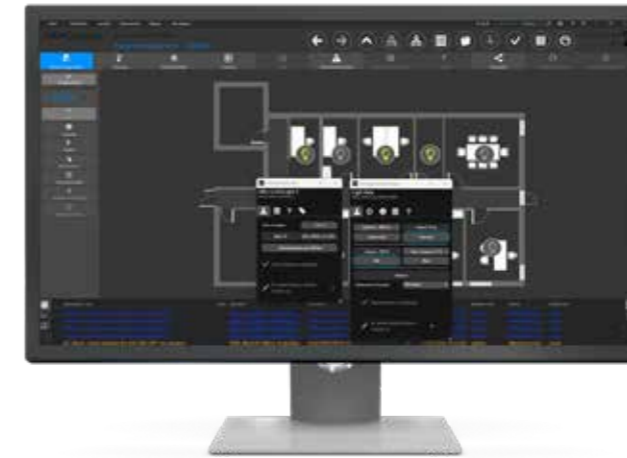


Room Automation with evon Smart Office



evon Smart Office is a comprehensive library for evon XAMControl (ACC package). The library fulfils all requirements regarding lighting, heating, ventilation, and aircon in a modern office building, independently of whether it is a new or a refurbished building. In addition, evon Smart Office supports concepts such as shared desks, open space, room tracking and cleaning.

As an open system, evon Smart Office controls everything automatically (BACnet, KNX, Dali, etc.) in order to reduce energy consumption when rooms are not occupied or to increase the comfort and productivity of employees when they are present.



Lighting Control with evon Smart Office

Lighting plays an important role in productivity and comfort in an office and can be automatically controlled by evon Smart Office via presence and movement detectors, and daylight sensors. Individual preferences can be adjusted via a Smartphone or web interface. In addition, central functions and time-controlled sequences help to save energy.



Shading in evon Smart Office

Shading in evon Smart Office includes the control of blinds, rolling shutters, and other shading systems. The goal of the controller is to reduce the energy consumption of the heating, cooling, and lighting systems by controlling the amount of sunlight and hence heat loading and glare in the rooms.

The use of a range of sensors (brightness, temperature, wind speed, precipitation) enables the position and angle of the blinds to be adjusted in such a way that energy consumption is minimised, and comfort maximized.

evon Smart Office also provides protective functions (frost, wind, and hail protection), locking functions (cleaning and maintenance), and protection against operator error (certain functions are locked when windows are open).



Climate in evon Smart Office

Fan coils, thermostats, radiators, underfloor convectors, valves for heating and cooling ceilings ... all components can be quickly and easily connected in evon Smart Office and ensure the best possible room climate with the minimum of energy. Apart from controlling lighting and shading, weather forecasts are also included so that smart offices can be controlled predictively and with the optimum amount of energy.

Of course, an individual user can also intervene manually using the room controller or Smartphone, whereby central locking functions prevent events such as running the heating at a maximum if the windows are open.



Open Space in Modern Offices

Open space concepts are the answer to flexible requirements placed on room occupation for modern buildings.

One of the greatest challenges is changing the distribution of rooms and areas due to unknown occupancy or a change in renter.

evon Smart Office simplifies allocation in room use directly in the visualisation. Completely without programming knowledge and using simple configurations, rooms and rented areas can be redefined.

Adaptations can be done directly by the user. This way, the visualisation always reflects the current use/rental situation of the object.



Shared Desk, Room Occupation and Cleaning

In times of remote working, the use of office space also changes. This is where the shared desk concept in evon Smart Office helps: employees can book workplaces in advance (via Smartphone app or QR code) and upon entry automatically gain access to all relevant control elements for their workplace (lighting, shading, climate) and can directly use their favourites from previous settings.

A dashboard shows an overview of the current office occupancy and also permits a person search. In order to ensure that shared desks and other working areas are kept clean and hygienic, cleaning rotas and protocols are implemented in evon Smart Office.



Simple Programming and Configuration

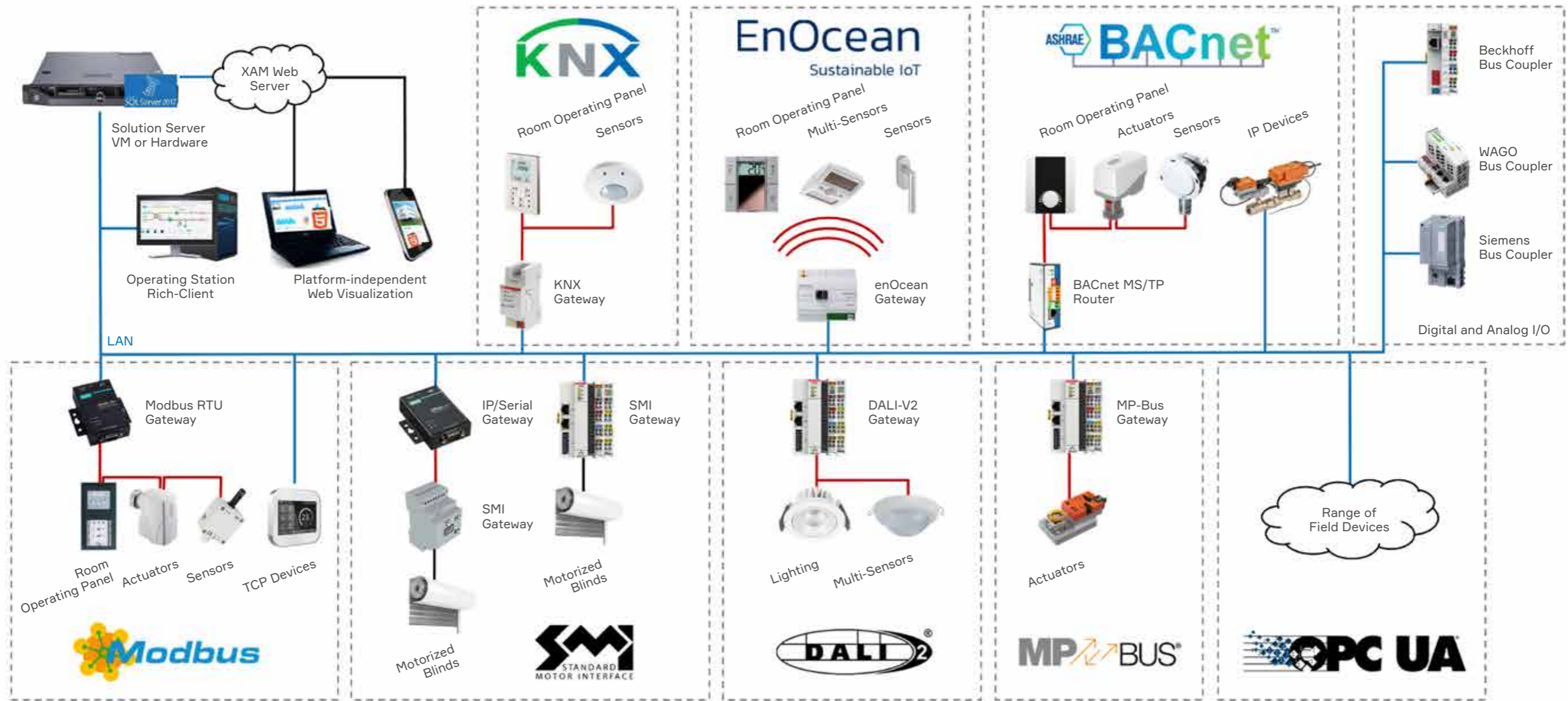
evon Smart Office minimises the time required for programming and engineering. Thanks to a high degree of flexibility, both integrator and operator have a free choice of components.

The evon Smart Office Library (ACC package) contains:

- ACCs for lighting, shading, and climate for visualisation and operation
- ACCs for shared desk, cleaning functions, and dashboards
- Templates for navigation and utility selection
- Predefined control functions
- Import function for rooms, areas, actuators, and sensors
- Simple parameter setting and configuration of device allocation
- Standardised interfaces for easy extensions of actuators and sensors from different manufacturers

System Topology Overview

Smart Office Solution Possibilities



Please contact an evon sales representative for a complete list of supported hardware and recommendations of components.



Energy Management with evon XAMControl

To ensure that your building makes careful use of energy resources and can operate in an optimum fashion, evon XAMControl offers an energy management system with an easy-to-read dashboard showing all relevant data. evon XAMControl provides optimum support for you to maintain transparency in your energy consumption and reduce costs, ultimately resulting in protecting the environment.



Seamless Energy Monitoring

You will need data basis for any optimisation. As a distributed energy management system, evon XAMControl uses a database to record and evaluate all data. Its high level of availability makes it a tool for energy management in accordance with ISO 50001. This ensures sustainable energy management and a high level of investment protection.

There is more: as soon as the values show significant deviations, you are automatically informed. Warning and alarm limits can be freely defined. In addition, you can compare similar devices and be in a position to implement continuous improvements.

Advantages of Energy Management by evon XAMControl

evon XAMControl's energy management helps prevent energy peaks, shows areas that could be optimized, and improves the understanding of energy flows in the buildings. The optimized planning using model-based load forecasting (add-on) is the basis for the optimal purchase of energy (portfolio management).

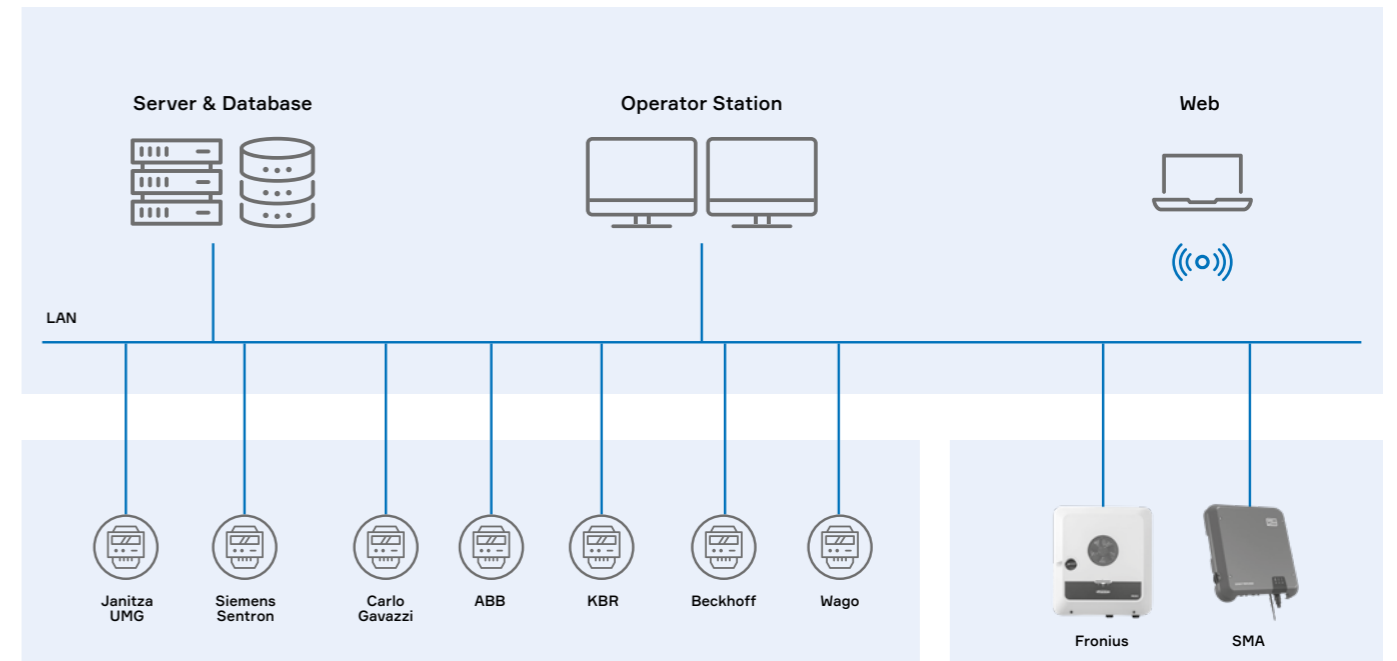
Fast Acquisition Thanks to QR Codes

Just as for maintenance, QR codes in evon XAMControl can also be used for monitoring. Simply create a QR code and mount it on the selected component. When the code is scanned, you immediately receive a status report of the components including an energy management report.

System Topology Overview

Energy Management

Control Centre



Meters

PV inverters



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