

Automation at your level. Have a winning advantage with outstanding usability, best ergonomics and excellent performance.

### zenon

### **EVERYTHING UNDER CONTROL FROM SENSOR TO ERP**

What do you need for optimal automation? An overview across complex equipment? Maybe also secure, controlled access to different hardware? Outstanding security and standard documentation of all operating actions? Or is your requirement the complex reporting of data from different sources? Whichever way you design your automation, zenon is on your side as a proven software for automation: ergonomic, easy to manage, platform independent and is the one solution with a size for all.



### **zenon Analyzer**Dynamic Production Reporting

Platform-independent Dynamic Production Reporting tool, which processes and presents data from the process to the ERP in real time.



## zenon Supervisor Independent SCADA System

Full visualization and control of complex equipment with a connection to SAP ERP and Microsoft Dynamics.



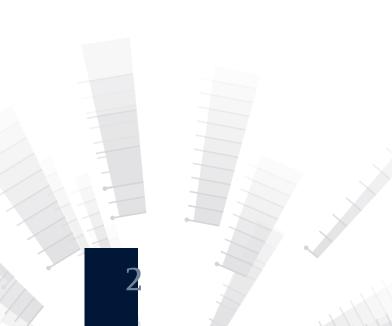
### **zenon Operator** Embedded HMI System

Specialized simple and ergonomic machine and equipment control.



### **zenon Logic** Integrated PLC System

zenon integrated PLC system with IEC 61131-3 programming environment.



However you decide to implement zenon and whichever variants you combine, your projects and data are preserved, even after switching from one product to the other, and are easily scalable. For example, you can upgrade a license at any time from zenon Operator to zenon Supervisor. After entering the license number, the new function range is immediately accessible - adaptations to your projects are not necessary. You can read more about zenon Supervisor in this brochure. You can find out more about other members of the zenon Product Family by contacting your zenon advisor or online at www.copadata.com.

zenon Supervisor

THE FUTURE IS ERGONOMICS



zenon Supervisor is an independent SCADA system, with which you can operate more profitably in the long term. Make work easier, inspire your customers and motivate your employees. Automate quickly and safely with zenon Supervisor and have the perfect tool to bring ergonomics to your projects, from the engineering to the runtime or in maintenance. With the proven principle, "set parameters instead of programming" you can shorten your engineering time by up to 80%. Extensive network functions, simple access via the web browser and connection of any desired hardware – zenon already offers all this "out of the box".

### **ENGINEERING**

You can develop projects in your own exact style, use available templates and intelligent wizards. You are able to reuse once created objects in other projects and keep an overview with the multi-project administration, also when working in a team.

### **MAINTENANCE**

Well documented and offering version administration, you can quickly find your way around any project and also easily access projects and equipment remotely.

#### **HOT RELOAD**

The Hot Reload even enables all changes to be made during a running operation. And your production keeps on running.

#### REPORTING

You will be informed of whatever is happening in as detailed a way as you wish. Starting with history of changes in engineering, up to effective reports in the runtime, right to calculating complex KPIs such as OEE.

#### **NETWORK**

Full data security, maximum availability without downtimes and no loss of data is guaranteed. zenon network technology with seamless redundancy and circular redundancy makes it possible. zenon is impressive not just technically, but also economically.

### **SECURITY**

zenon is continually being adapted to modern safety standards. This provides stable and safe equipment running.

# Engineering

### WELL PLANNED AND SIMPLY INTUITIVE

Designing projects and easy implementation becomes a pleasure with zenon. Adapted to various industries such as Automotive, Pharmaceutical, Energy & Infrastructure or Food & Beverage, zenon supports your engineering with intelligent wizards and easy to parameterize properties. You save time and can create applications of the highest quality in stability and performance.

With zenon you can plan projects exactly to suit your needs and preferences, networked and detailed. Because you take ready to use and easily configurable elements, use once created objects again and again and have access to all currently required objects in any situation.

Thanks to the ergonomic project orientation the productive handling with zenon Editor and Runtime

is quick to learn. This means your employees have short training times. Reach your goals more quickly and increase productivity.

Completed projects can be easily reused, either completely or partially. To create a line of similar projects, just import a suitable completed project and quickly adapt it without much effort. New hardware can be connected with a few clicks, variables are imported directly from the PLC or configured comfortably in the Editor.

That way start up efforts and acceptance times are reduced, you can shine with quicker maintenance and work more profitably all round.

Customers confirm that they have up to 80% less project planning times and considerably higher productivity.



# Maintenance

### SIMPLE AND LOCATION-INDEPENDENT

Start-up and continuous maintenance of equipment can be a real challenge - or as easy as with zenon. You can already simulate running operations in the project planning phase and so be perfectly prepared for the start-up. You can take care of the ongoing equipment maintenance on site or at any desired PC, just as you wish. Because the well secured zenon web technology enables you to access equipment or a project with any current web-browser.

### PERFECT START-UP

zenon already offers you a realistic simulation mode during the engineering phase. So you can test your project on simulated equipment including real PLC reactions and perfectly prepare the start-up. You can discover possible error sources in time and protect yourself from unpleasant surprises. Thus, you ensure quick start-up procedures which take place as planned.

### SIMPLE MAINTENANCE

zenon gives you a choice of whether your technicians maintain equipment on-site or remotely, whether you use a multi-monitor system or a small notebook. zenon projects run automatically without special adaptation on all supported platforms. You continually use the same project, independent of resolution and number of monitors.

A special strength of zenon lies in its Hot Reload function. If a project has been changed, it can be updated without disturbance to the equipment during running operations. The equipment need not be stopped nor need the maintenance technician be on site.

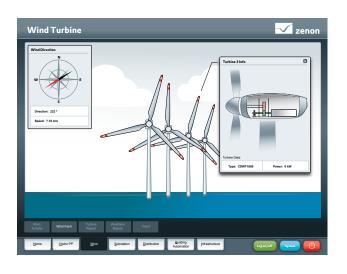
zenon can diversely support you for engineering, start-up procedures and maintenance of equipment. You have control in every situation and can also intervene remotely. The equipment also runs robustly and without stops during maintenance tasks.

### **START-UP PROCEDURES:**

- Before start-up is begun you can simulate and test with real values
- Multi-project administration for step-by-step implementation
- Diagnosis possibilities integrated in zenon from the network right to the PLC
- Setting parameters reduces errors in the project

### **MAINTENANCE:**

- Maintenance work possible on site and remotely
- Simulation of changes to test before updating into the equipment
- Hot Reload enables changes to be made without an equipment stop
- Project versioning and history of changes give an overview of installed project statuses and changes which have been made.
- One project for all platforms:
   Changes need only be made once
- Maintenance mode: take single project parts out of operation during maintenance



# zenon Editor

EASY (AND) EFFICIENT ENGINEERING

The zenon Editor is your control center for easy and clear engineering. All modules need the same databasis and can be easily activated at any time via licensing. So you can put the Editor together, tailored exactly to your tasks and needs and to support you perfectly:

Instead of error-prone scripting or programming, you can develop your projects using easy and secure parameter settings of properties. zenon brings even complex functionalities "out of the box". However, the well documented interface for VBA and VSTA enables you to link individual programs with zenon at any time or to completely automate the project planning.

The zenon Editor offers you full creative freedom for your projects. You can create easily operable visualizations and can carry out very complex automation tasks in a targeted and safe way. Combine your production processes with the management level and gain an overview using complex reporting. Here you can profit, for example, from:



- Templates: Ready to use templates makes for easy engineering. Here, not only can you use the provided templates, but you can also simply create your own templates.
- Project versioning: You can also version all of your projects. So you can clearly organize different variants of a project and can follow exactly who changed what and when.
- Project comparison: An own wizard enables you to compare projects. Therefore you can quickly recognize important differences, detect mistakes or identify subsequent changes.
- Reusability: zenon is built up in an objectoriented way. All pre-configured objects can be reused across projects. Pre-defined functions, symbols or variables need not be re-created.
- Wizards: Many intelligent and individually configurable wizards and program assistants ease engineering, automatically take over complex tasks or perform project planning steps.

The ergonomic zenon Editor supports you with many complex functionalities such as pre-defined templates, intelligent wizards and consistent object-orientation. So that engineering is quicker and safer and still stays flexible for swift changes and new demands. You can always keep an overview, gain freedom for your creativity as well as work efficiently and co-ordinated in a team...

# NETWORK AT THE CLICK OF A MOUSE:

Configuring a zenon network is extremely easy. You only need a functioning network infrastructure with TCP/IP and name resolution. In zenon you activate the property "network project" and define the server without programming. Finished. For a redundant network you need to additionally define a standby-server. And again, finished.

zenon Runtime has been setting worldwide standards for years when it comes to flexibility, performance and functionality. So you are independent during the set-up and help users to unfold the full performance of machinery and plants.

# Runtime

### STRONG PERFORMANCE, SECURE AUTOMATION

# FLEXIBLE AND HARDWARE INDEPENDENT

Which hardware you use is your choice. zenon already offers over 300 communication protocols, not only for many proprietary drivers but also covering all important standards (e.g. OPC UA - certified OPC UA server, BACnet, IEC-61850 KEMA certified, IEC-60870, VDMA Laetus, Modbus, ODVA).

# STRONG PERFORMANCE, ERGONOMIC, INTERNATIONAL

Your projects are multilingual and at home in many cultures. Using the fully Unicode capable online language switch as well as the online shift of units and palettes, you can adapt your projects at the press of a button to various international requirements or special situations. Therefore all users can operate projects safely and intuitively in their familiar language.

### **SECURELY MANAGE COMPLEX RECIPES**

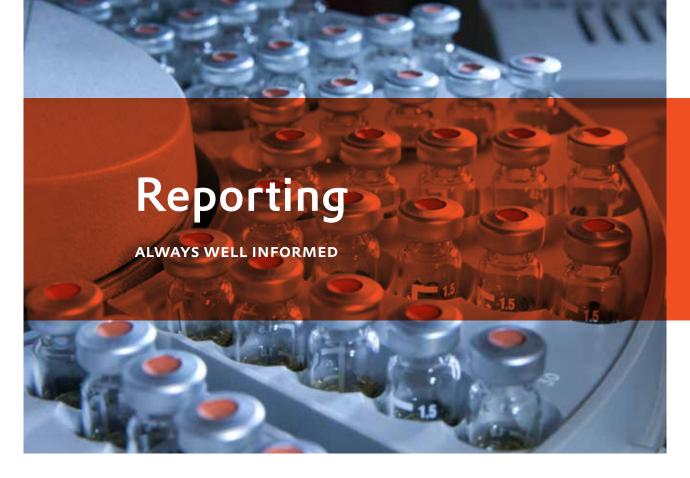
Complex recipes can be easily and securely modified even during the Runtime. An own screen enables the user, to call up only the part that needs to be changed and adjust the necessary parameters directly in the screen. For complex batch production we recommend the ISA-88 compatible batch control. The combination of zenon's outstanding connectivity, the very secure user administration and the sophisticated reporting offers you a powerful tool for flexible, dependable and perfectly documented batch production.

# MULTI-PROJECT CAPABILITY OFFERS OVERVIEW

zenon easily performs several projects simultaneously during a runtime environment. You can therefore gain an overview and implement a very secure redundant operation with little effort. You offer users an overview of several projects or certain equipment parts from a control station.

### **SECURE ALARMING**

By reacting to messages and alarms quickly you can avoid expensive downtime and ensure that the effectiveness of equipment remains high. zenon Message Control automatically notifies and informs user personnel and decision makers independent of their current location - by SMS, e-mail or voice message. Through mobile access via a web server or Smartphone gateway the information which is needed for the reaction are obtainable, independent of location.



zenon always keeps you up-to-date. As precise and comprehensive as you like – and, if necessary, across systems too.

Reports can be easily created according to various requirements, optimally supported by configured and ready to go templates. Reports which are needed again and again can be easily and automatically created and also automatically sent to chosen recipients or complete teams.

Fully graphical reporting directly in the Runtime gives you and your equipment operators an overview at any time. From batch reports to graphical alarm statistics and prompt production analyses, through to performance indicators and much more. At the press of a button you can export and archive your reports at any time.

zenon Reporting offers you a complete overview and delivers all required reports per mouse click. Here too, you can find all the typical zenon features: simple operation and perfect ergonomics.



Do you need reports which can also calculate complex KPIs such as OEE, or that compare time-frames or include external data sources? You can rely on zenon Analyzer. It creates reports from various sources in real time and automatically provides you with any desired recipients. Utilize data directly from zenon Supervisor and zenon Operator or access data from different programs and control systems as well.



With zenon Logic, zenon offers an integrated PLC system. Here you can, for example, use real PLC code for simulations. Or you can access any hardware, such as a sensor. As an efficient IEC 61131-3 programming environment, zenon Logic offers you the most widely used languages (IL, ST, LD, FBD/CFC and AS).

# THE TOOL FOR PERFECT PROJECT SIMULATION

zenon uses zenon Logic to save you time and energy during start-up and for project changes - with perfect project simulation. To test a project, just go to the test mode. zenon Logic simulates the PLC and offers realistic values during testing. You can immediately see how the project is running in the plant and can correct any mistakes before going live.

#### **COMPLETELY INTEGRATED**

zenon Logic can be deployed on various hardware platforms, from the PC to the automation hardware, and utilizes the same database as zenon Supervisor and zenon Operator. You can, therefore, always access the same data and only need to create objects and variables once, then update them only once. You gain an overview, speed and security.

# zenon shines with excellent performance and comfortable maintenance, even in a project with over 6,000 process screens.



### zenon

### **PARTNERS FROM VARIOUS INDUSTRIES**











zenon has been used for over 25 years by many companies worldwide and in various industries. zenon is firmly positioned in automation, particularly in the Automotive, Food & Beverage, Energy and Pharmaceutical industries.

### **GLOBAL PRESENCE - LOCAL SUPPORT**

With eleven subsidiaries in Europe, North America and Asia and an international network of around 15 distributors and over 100 partners, COPA-DATA is active in more than 40 countries.

### **COMPLETE AUTOMATION SOLUTIONS**

Together with the competent partners of the COPA-DATA Partner Community, COPA-DATA offers tailor-made solutions for your complete automation.





Your advantage efficient engineering and
enthusiastic users.

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# do it your way

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our partners for their friendly support and the pictures they provided.

Publication number: CD-ZSF-E-14-10-04

