



**zenon**  
by COPA-DATA

# Harness the sun's power – with zenon

*Collect solar power easily and efficiently with zenon –  
our comprehensive solution is designed to help you  
automate photovoltaic power plants.*



## Get more from your panels

*It can be challenging to manage and monitor photovoltaic systems and, in particular, their performance data. The zenon Software Platform is designed to help you meet this challenge. It provides all the components you need to quickly and easily deploy an end-to-end SCADA application. Not only does this give you the best possible control over your systems, it also reduces operating costs and improves productivity.*

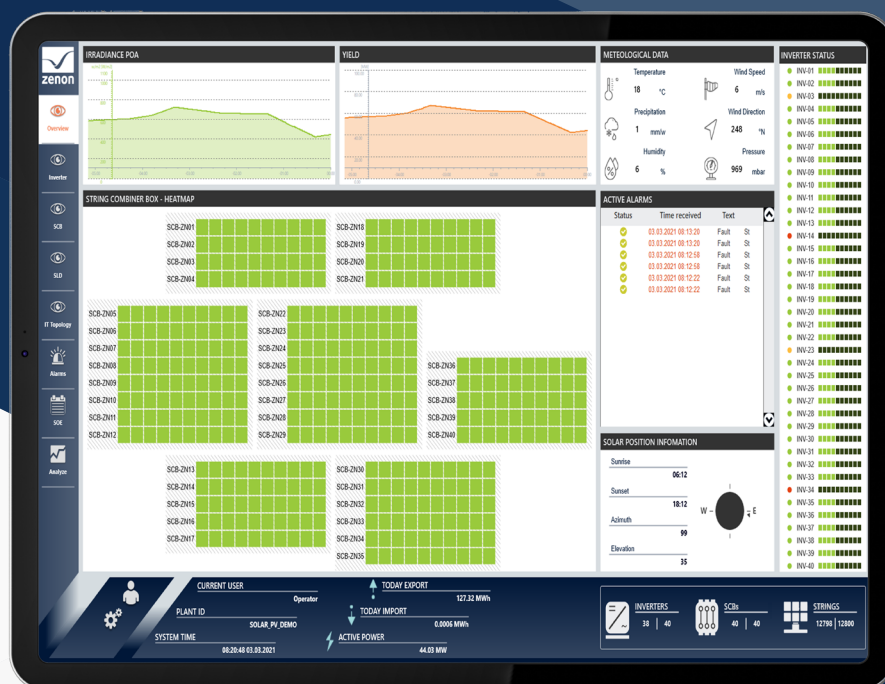
### KEEP A GRIP ON VOLATILITY

A solar farm is more than just a field of panels. For this reason, zenon helps you to not only manage photovoltaic systems but also to integrate and automate secondary systems. The result is a homogeneous, comprehensive solution based on a single platform. With its wide-ranging connectivity (e.g. IEC 60870, DNP3, OPC UA), zenon enables you to connect directly to the utility grid operator and coordinate requirements without any complexity. Easily integrate legacy storage systems and flexibly add new storage systems to make the most of your PV yield. zenon is a user-friendly solution that noticeably reduces complexity.

### STAY INFORMED WITH RELIABLE DATA

Dirty or aging components can result in problems in solar power collection. One of the most common challenges is to be able to troubleshoot and identify errors and downtime accurately and without delay. zenon meets this requirement by providing a process overview with real-time data, including alarms, in case something out of the norm occurs during operation. Thanks to the intuitive display, users can troubleshoot issues quickly. And, even if you are not on site, remote notifications via SMS, email or voicemail keep you updated at all times. This enables mobile service teams to quickly find the details and background information – and to act more efficiently. Because whoever has access to reliable information on productivity at any time and from any location has an advantage, zenon notifies selected persons in case of unfore-





seen events. Mobile web visualization, including customized dashboards via HTML5, further ensures smooth operation via mobile devices.

## SECURE OPERATIONS

Of course, zenon does not compromise when it comes to security and protecting your system and its data. The seamless, patented redundancy in zenon ensures maximum data consistency. In the event of redundancy being required, all data is recorded completely. Communication links are also monitored at all times. To further protect against cyberattacks, zenon uses a multi-layered security architecture, including encryption and authentication services. The preventive measures also include centralized user management (Active Directory, LDAP, RADIUS) and a modular security structure for zones and monitored interfaces. Upgrades and enhancements can be imported during operation. Simple update tools enable you to systematically perform maintenance on the automation solution. This ensures a high level of cybersecurity.

## COMPREHENSIVE REPORTING

zenon not only records production data but also presents it in user-defined reports. This enables seasonal and cross-lo-

cation comparisons or the comparison of historical and real-time data, which is archived on the integrated zenon Historian. In this way, zenon shows you where there is room for improvement. Plus, you don't need an external system to record data. This reduces interfaces, minimizes security risks, and enables you to improve the efficiency of your operations over the long term.

## EFFICIENT ENGINEERING

Because it can take a lot of time to configure automation solutions, we believe strongly in efficient engineering. We design zenon with this in mind. The software platform already delivers many components out of the box. These include configurable functions, wizards for recurring tasks, and Smart Objects. The latter consist, for example, of variables, drivers, symbols, and features. zenon automatically creates all the required substitution rules, including all the necessary links. This standardization makes zenon easier to maintain, and it significantly reduces training effort. The variety of drivers for zenon (over 300 protocols) also keeps things simple by providing flexibility and allowing third-party systems to connect directly. This means your photovoltaic system is always scalable and makes zenon a safe investment for the future.

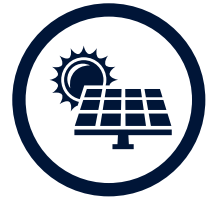
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