GridVis® – Power grid monitoring software



GET THE MOST OUT OF YOUR ENERGY DATA

Janitza

USING ENERGY DATA CORRECTLY

In a world where energy data is literally worth its weight in gold, its efficient use is essential. However, managing the ever-growing flood of data presents many companies with major challenges.

GridVis® power grid monitoring software makes the invisible visible and transforms complex energy data streams from an opaque black box into valuable, manageable information. With a variety of data analysis tools, GridVis® enables the visualization of energy flows across all media, generates meaningful key performance indicators, and offers alarms and automation.

These functions are essential to solve a wide range of problems effectively.

Visualizing energy flows with GridVis® makes costs and ${\rm CO}_2$ emissions tangible and controllable. It not only supports compliance with normative requirements such as ISO 50001, but also facilitates the creation of key performance indicators and measured values as well as automated documentation. The software creates comprehensive transparency in your energy flows, detects faults early, and helps to improve the availability of your systems.



LOWER YOUR ENERGY COSTS



SECURE CERTIFICATION



GET AN OVERVIEW OF CO, EMISSIONS



ENSURE TRANSPARENCY



COMPLY WITH REGULATORY REQUIREMENTS



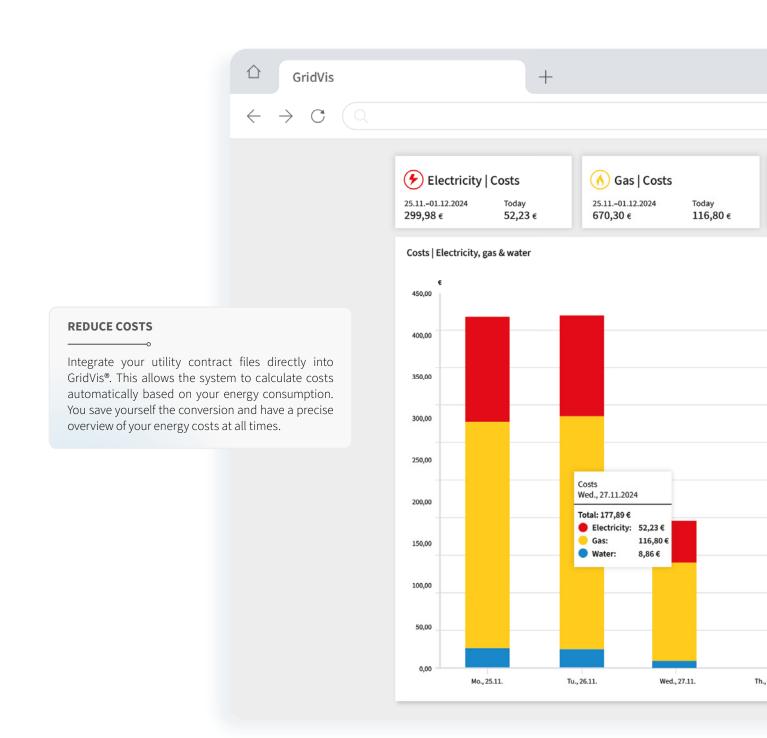
ENSURE HIGH AVAILABILITY



LOWER YOUR ENERGY COSTS

Display your energy-related costs simply and clearly. Contracts and conversion factors can be easily stored to calculate costs automatically.

Once you have an overview, energy losses and avoidable costs can be identified and reduced in the long term by means of targeted measures.



Energy costs



EVALUATIONS

Use numerous tools and functions to evaluate and compare data easily:

- Creation of key performance indicators to check the effectiveness of measures
- Conversion of costs e.g., for a production line
- Create reports and dashboards
- Overviews for comparing several time periods with each other



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DOCUMENTATION

GridVis® offers you the possibility to store your data securely. In addition, you can create reports and have them automatically generated at regular intervals and sent by email, for example.

COMPLY WITH ISO 50001

GridVis® helps you to evaluate energy data comprehensively and obtain ISO 50001 certification. Present meaningful key performance indicators and document the effectiveness of the measures taken.

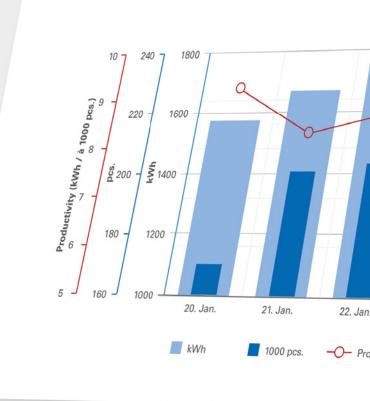
Whether electricity, gas, water or other media, GridVis® offers a complete overview and also has ISO 50001 certification.



KEY PERFORMANCE INDICATORS

Use numerous tools and functions to evaluate and compare data easily:

- Create and manage individual key performance indicators
- Calculation and visualization directly in GridVis®
- Easy overview thanks to trend and rating system

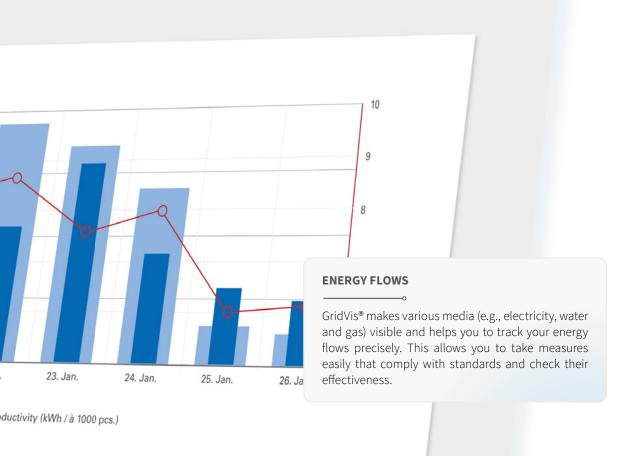


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VISUALIZATION

Create visual overviews of your data and capture all important information at a glance:

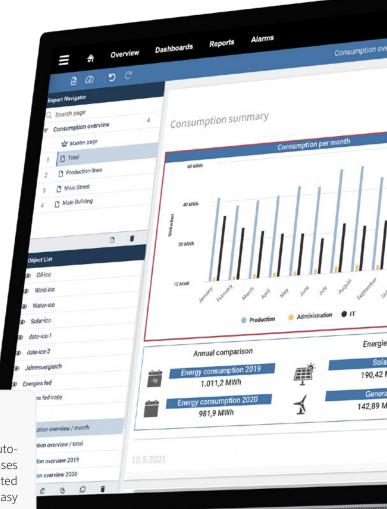
- Clear presentation of measured values and temporal developments
- Dividable dashboards with key performance indicators and live values
- Individually created reports for documentation



GET AN OVERVIEW OF CO₂ EMISSIONS

Get a quick and easy overview of your CO₂ emissions. With GridVis® you can automatically convert your energy consumption into emissions and thus easily cover Scope 1 and 2.

This simplifies accounting and helps to meet standards and requirements as well as protect the environment.



MANAGE CONTRACT FILES

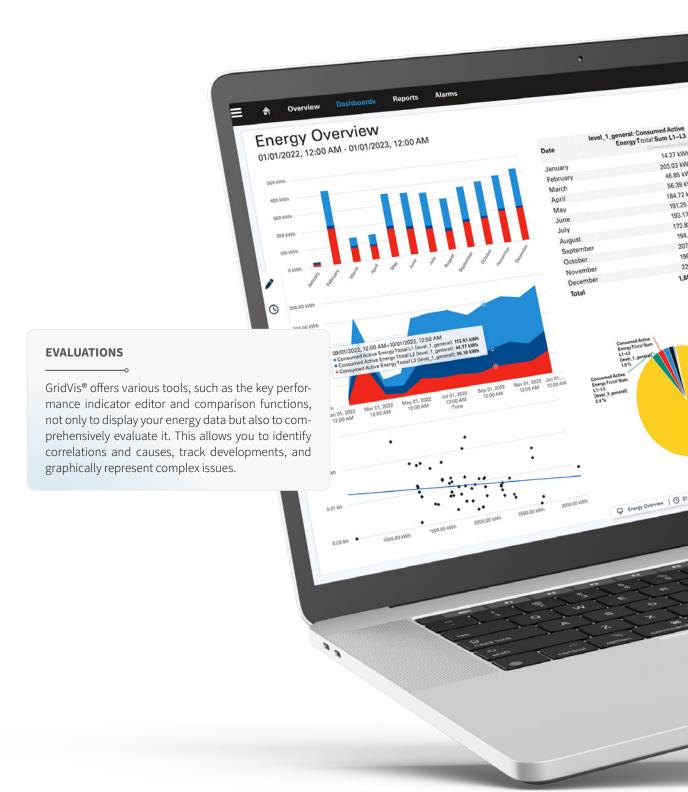
Store contract files in GridVis®. The system then automatically calculates your CO₂ emissions. Other gases and environmentally harmful substances are converted into CO₂ equivalents—for better comparability and easy overview.



CREATE TRANSPARENCY

GridVis® enables you to process the enormous amounts of data necessary to create comprehensive transparency easily and understandably. Transparency is the basis for all measures relating to energy efficiency, costs, compliance with standards,

and much more. Whether read in directly or imported, GridVis® presents even complex information clearly.



Transparency



OVERVIEWS

Janitza® GRIDVISA/A

- Individual and standardized dashboards and reports
- Visual presentation for easy-to-understand data
- Automatic documentation in the form of reports



DATA IMPORTS

- MSCONS, CSV, OPC UA, or manual data entry
- Import data for a wide variety of media (e.g., water, gas, fluids)
- Additional information such as production data or quantities

COMPLY WITH STANDARDS

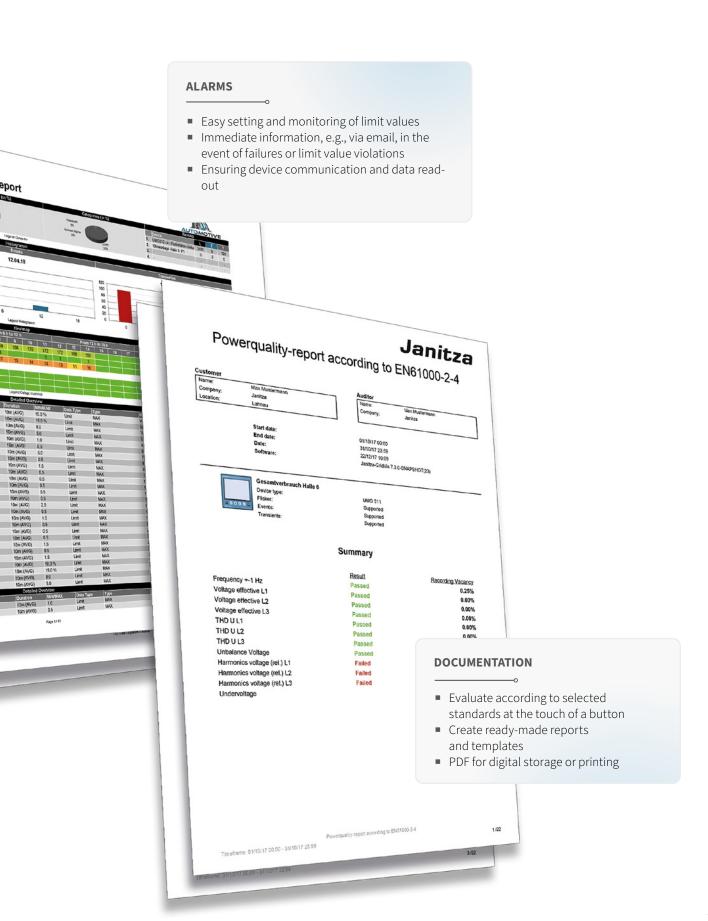
Standards provide safety regulations, describe rules relating to energy consumption and efficiency, and are binding for many companies. GridVis® includes a whole range of evaluation options for various standards and thus supports you in compliance and documentation.



STANDARDS

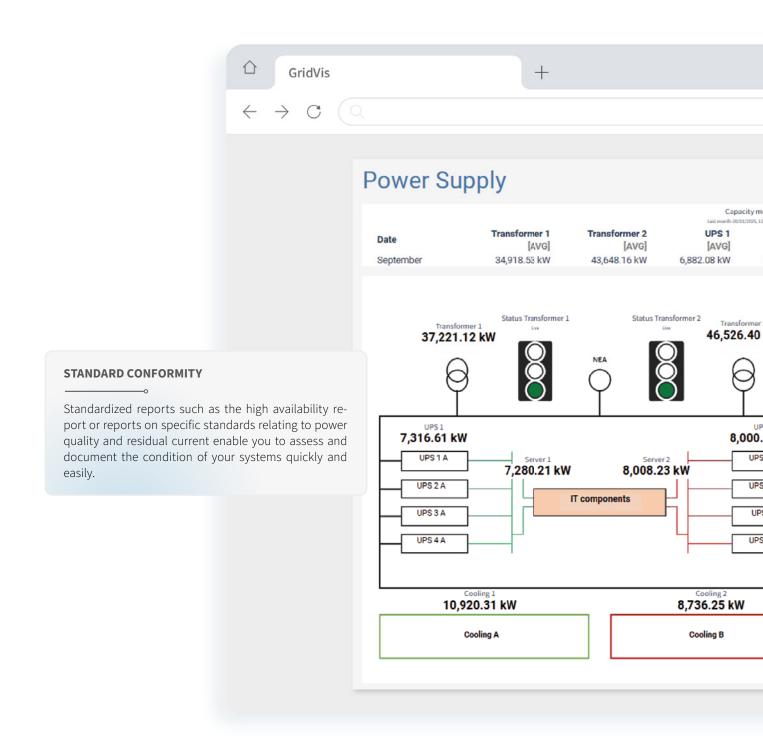
- Standardized reports for numerous power quality standards (e.g., EN 50160 or EN 61000-2-4)
- Evaluation of residual current, e.g., for DGUV V3
- Monitoring and evaluation of energy data for various energy management standards

Standards



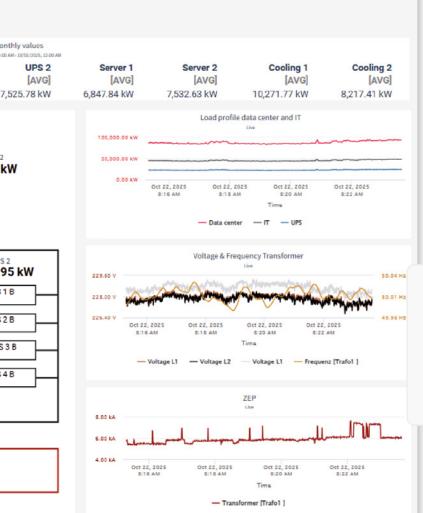
ENSURE HIGH AVAILABILITY

GridVis® helps you detect power quality disturbances and monitor your residual currents. The alarm system allows for a quick response in the event of deviations and limit value violations. This allows you to act immediately and prevent breakdowns, damage, and unnecessary wear and tear. Or use the tools to uncover causes of events.



CAUSE ANALYSIS

The various analysis tools, such as the Event Browser, enable detailed root cause analysis. This way, you can not only identify problems, but also identify their causes and eliminate them in the long term. Dashboards with special PQ objects help you to present complex relationships in an understandable way.



LIMIT VALUE MONITORING

- Create limit values for various measured values
- Automated limit value monitoring and immediate alarm in case of deviations
- Constant monitoring of device communication and memory reading

MANAGING THE FLOOD OF DATA

GridVis® is a tool for monitoring energy consumption and supports you in analyzing voltage quality and monitoring residual current. These functions are essential to ensure the efficient operation of your systems and to identify potential risks at an early stage.

The power grid monitoring software is therefore not able to provide comprehensive transparency into your energy flows, but rather enables you to ensure high availability in your systems by detecting potential faults at an early stage.

ENSURE AVAILABILITY

- Power quality and residual current always in view
- Monitoring compliance with standards
- Visualization for easy understanding of complex issues
- Limit value monitoring and automated alarms
- Simple documentation with standardized reports for evidence

CREATE TRANSPARENCY

- Tools for comprehensive energy transparency in your company
- Overview of energy costs and consumption
- Reliably determine CO₂ emissions
- Improve energy efficiency and reduce costs
- Successfully implement intelligent energy and load management



FLEXIBLE APPLICATIONS OF YOUR SOFTWARE

GridVis® is scalable in both scope and functions. This means it can be used in numerous sectors and applications. From small craft businesses, to production halls and data centers, to airports and large building complexes.







Application in data centers

Energy monitoring software for data centers has numerous tasks. High availability is important in data centers because every failure costs a lot of money. High availability stands and falls with a reliable power supply and a grid compatibility level which must be maintained. Utilization rates and extreme values for many parameters must be monitored continuously.

GridVis® offers tools for all essential core tasks and supports operations with customized functions active in operational business. With GridVis® you can:

- Improve energy efficiency
- Ensure high electrical availability
- Monitor fire protection and EMC
- Manage cost centers

Application within an industry

The industry must handle various challenges. Whether it is about energy management according to ISO 50001, security of supply, or the recording of ${\rm CO_2}$ emissions, GridVis® supports you in all aspects.

With numerous functions, you can monitor and analyze your energy data and have an overview of all important information at all times. Standardized reports in accordance with numerous standards make both documentation and analysis easier.

This creates the basis for standard-compliant energy management and a secure power supply. You will also sustainably reduce your energy costs. GridVis® helps you:

- Implement ISO 50001 in compliance with the standard
- Evaluate and monitor CO₂ emissions
- Prevent disruptions and failures

Application in building management

With GridVis® you can make your building management more efficient and sustainable. The power grid monitoring software creates transparency and provides detailed insights into your energy data. How to evaluate the CO_2 emissions of your buildings and identify avoidable consumption. In addition, GridVis® enables the evaluation of energy costs for various consumption media, such as gas, water, or heat.

With GridVis®, you can optimize your building management while helping to reduce operational costs and CO₂ emissions. GridVis® supports you in these tasks:

- Evaluate and monitor CO₂ emissions
- Conduct comprehensive consumption analyses
- Sustainably reduce energy costs
- Create comprehensive transparency
- Create individual evaluations

ENERGY DATA RECORDING

WHEN HARDWARE AND SOFTWARE INTERACT

To achieve the best results with GridVis®, you need reliable data. In addition to GridVis®, Janitza also offers the appropriate hardware. With energy analyzers such as the UMG 800 or specialized measurement devices such as the UMG 96-PQ-L-LP for measuring power quality, you receive a reliable database and benefit from the advantages of a system solution from a single source:

Perfect coordination

Our hardware products and software solutions are precisely coordinated to ensure maximum power and reliability.

Comprehensive advice

We offer not only products but also advice—tailored specifically to your needs. This way, you benefit from a thorough understanding of both system components and minimize the risk of interface problems.

No gaps in jurisdiction

Since hardware and software come from the same company, there is always a clear contact person if questions or problems arise.

Rely on an integrated solution that simplifies your workflows and increases your energy efficiency. With our system, you have the security that everything will run smoothly and you can concentrate on what matters most: Your core business.



EXPAND YOUR SOLUTION

ADDITIONAL OFFERS REGARDING GridVis®

The multi-protocol server extends the connectivity of GridVis®. Users benefit from low setup effort and high data availability. With the multi-protocol server, you can use your measurement data at the OPC UA level.

In addition, Janitza offers various services related to GridVis®, such as various training courses in which you can learn how to use GridVis® or further expand your understanding.

Multiprotocol server

- Multi-protocol server with integrated GridVis® driver in addition to the OPC UA Client
- Low setup effort and high availability of all measurement data
- GridVis® measurement device structure directly in the OPC UA tree
- Attaching multiple GridVis® projects

Training sessions

- Training on how to use GridVis® for beginners or advanced users
- Get answers to your personal questions
- In-person or online training or individually in your company for maximum benefit

Further information about the entire Janitza portfolio





ABOUT JANITZA

Janitza develops complete solutions for energy measurement technology that ensure transparent energy flows and monitor the quality of the energy supply. The global company, with headquarters in Germany, offers individual solutions for customers from a range of industrial sectors, such as data centers, the manufacturing industry, construction & infrastructure, energy supply and renewable energies.

PORTFOLIO

The Janitza product portfolio consists of innovative measurement devices and GridVis® power grid monitoring software which is customized to work perfectly with them all, supplemented with quality components. Janitza clients worldwide benefit from solutions that aid with energy data management, power quality monitoring, load management and residual current monitoring, all within a standardized system environment – Made in Germany.

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