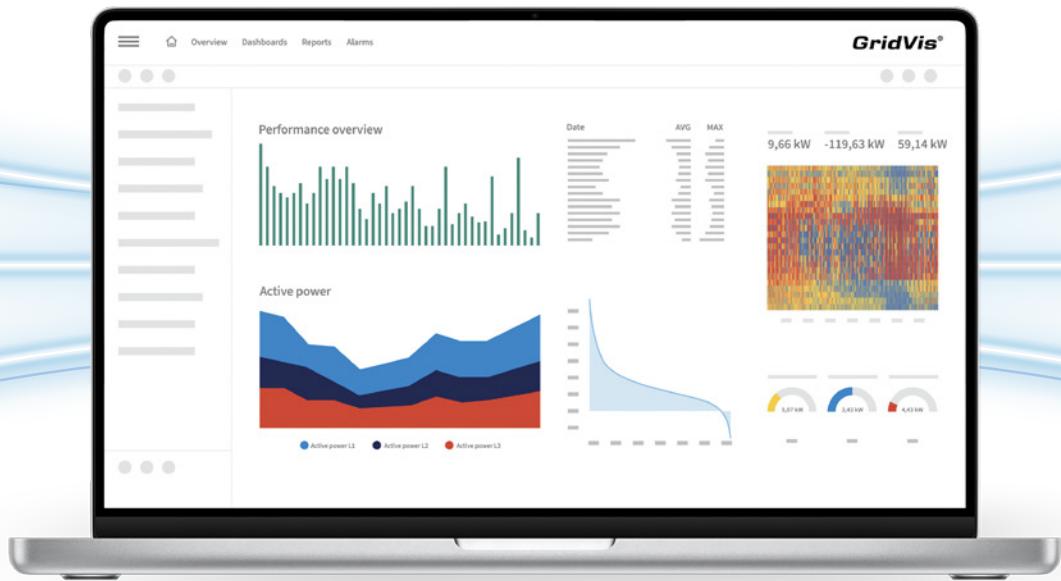


GridVis® – Power Grid Monitoring Software



GET THE MOST OUT
OF YOUR ENERGY DATA

Janitza

USING ENERGY DATA CORRECTLY

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

Janitza's 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 (KPIs), 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 CO₂ emissions tangible and controllable. It not only supports compliance with normative requirements such as ISO 50001 but also facilitates the creation of KPIs, measured values, and 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**

**ISO
50001**

**SECURE
CERTIFICATION**

CO₂

**GET AN OVERVIEW
OF CO₂ EMISSIONS**



**ENSURE
TRANSPARENCY**



**COMPLY WITH
REGULATORY
REQUIREMENTS**



**ENSURE HIGH
AVAILABILITY**

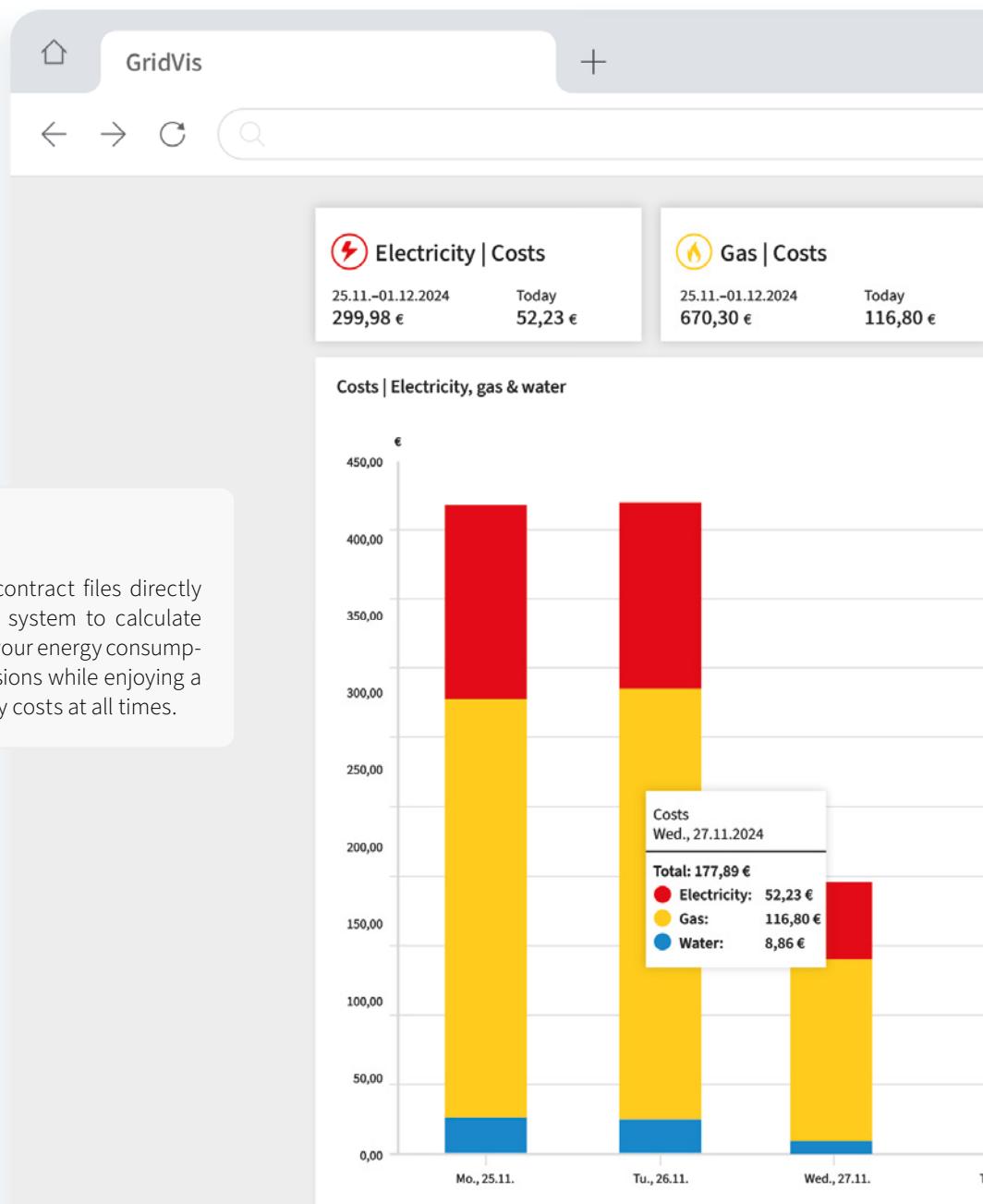
Power Grid Monitoring Software



LOWER YOUR ENERGY COSTS

Display your energy-related costs simply and clearly. Contracts and conversion factors can be easily stored, allowing costs to be calculated 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.



REDUCE COSTS

Integrate your utility rate or contract files directly into GridVis®. This allows the system to calculate costs automatically based on your energy consumption. Eliminate manual conversions while enjoying a precise overview of your energy costs at all times.



EVALUATIONS

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

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



Water | Costs

25.11.

– 01.12.2024

Today

54,92 €

8,86 €

25.11.–01.12.2024 < > Today



28.11.

Fr., 29.11.

Sa., 30.11.

Su., 01.12.

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

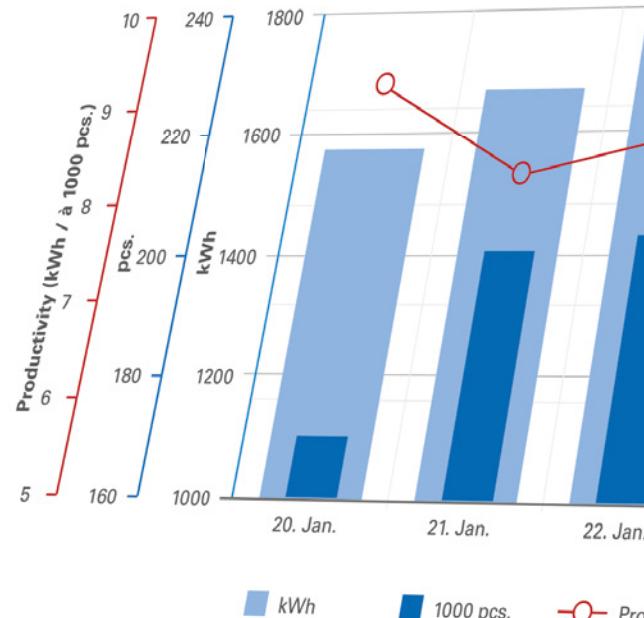
GridVis® helps you to evaluate energy data comprehensively and obtain ISO 50001 certification. Present meaningful KPIs and document the effectiveness of the measures taken.

Whether electricity, gas, water or other media, GridVis® offers a complete overview and supports ISO 50001 compliance.

KEY PERFORMANCE INDICATORS

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

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



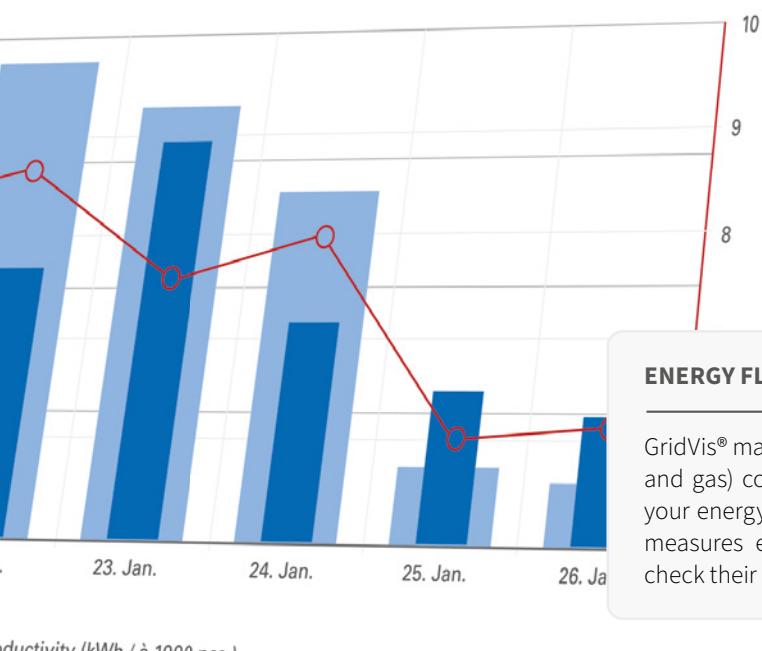
VISUALIZATION

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

- Clear presentation of measured values and temporal developments
- Customizable dashboards with KPIs and live values
- Individually created reports for documentation

ENERGY FLOWS

GridVis® makes various media (e.g., electricity, water and gas) consumption visible, helping you to track your energy flows precisely. This allows you to take measures easily that comply with standards and check their effectiveness.



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, simplifying Scope 1 and 2 reporting and coverage.

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

The screenshot displays the GridVis software interface. The top navigation bar includes 'Overview', 'Dashboards', 'Reports', and 'Alarms'. The main window is divided into several sections:

- Report Navigator:** Shows a tree structure with 'Consumption overview' at the top, followed by 'Master page', 'Total', 'Production lines', 'Main Street', and 'Main Building'. A search bar is also present.
- Object List:** A list of objects including 'Oil-ico', 'Wind-ico', 'Water-ico', 'Solar-ico', 'date-ico-1', 'date-ico-2', 'Jahresvergleich', and 'Energies fed'.
- Consumption summary:** A bar chart titled 'Consumption per month' showing energy consumption in MWh for each month from January to October. The chart includes categories for 'Production' (blue bars), 'Administration' (orange bars), and 'IT' (black bars).
- Annual comparison:** A section comparing energy consumption between 2019 and 2020. It shows a 10.5% decrease from 1,011.2 MWh in 2019 to 981.9 MWh in 2020.
- Information:** A sidebar on the right provides details such as 'Solar 190,42 MWh' and 'General 142,8 MWh'.

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.

Janitza® GRIDVIS-ENERGY

Consumption total

316,4 MWh
144,7 MWh
520,8 MWh

Production Administration IT

Consumption of all Media

Water 2,3 m³/h
Oil 7,2 m³/h

Bar Chart

Size & position

General Settings

Name
Consumption per month

Show Title Bar
 Show Status Bar
 Show Frame

Datasource

Production Production measuring
Administration Administration measuring
IT IT measuring

Add value

Aggregation
Month

Graph settings

Timerange Selection
01.01.2020, 00:00 - 31.12.2020
 Timerange differs from system
[Select time range](#)

Show Legend
 Show Values

Font Size for Column Labels

UNDERSTANDABLE OVERVIEW

- Easy-to-understand and easy-to-use dashboards
- Intuitive consumption analysis
- Extensive evaluation and comparison options

GAS, WATER, COMPRESSED AIR

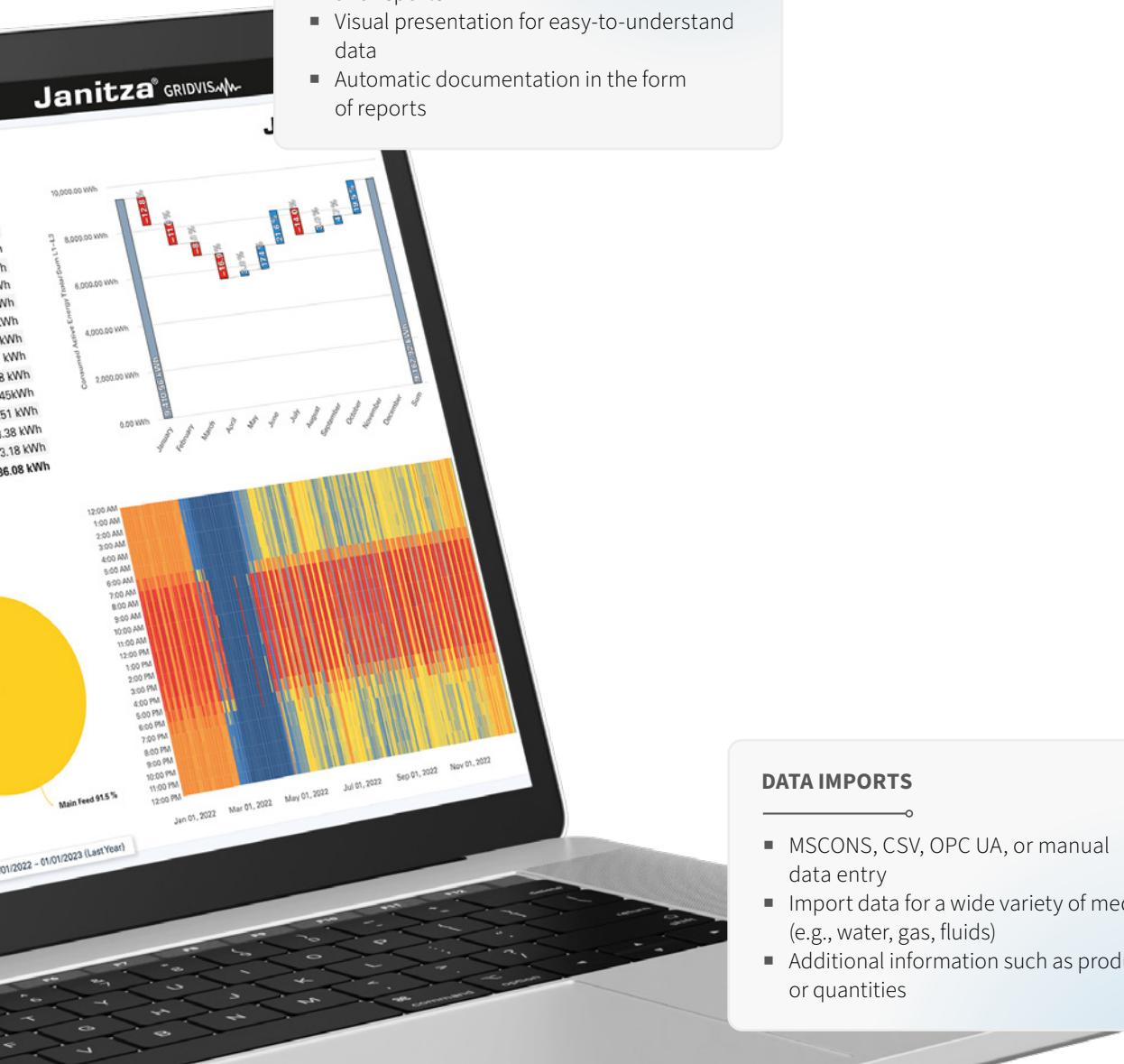
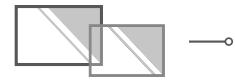
With GridVis® you can not only evaluate your electricity consumption and convert it into emissions, but all other energy sources and forms can also be integrated and stored in the software. This way, you can manage all your Scope 1 and 2 emissions in one system!

CREATE TRANSPARENCY

GridVis® enables you to process the enormous amounts of data necessary to create comprehensive transparency easily and clearly. Transparency is the basis for all measures relating to

energy efficiency, costs, compliance with standards, and many other operational goals. Whether read in directly or imported, GridVis® presents even complex information clearly.



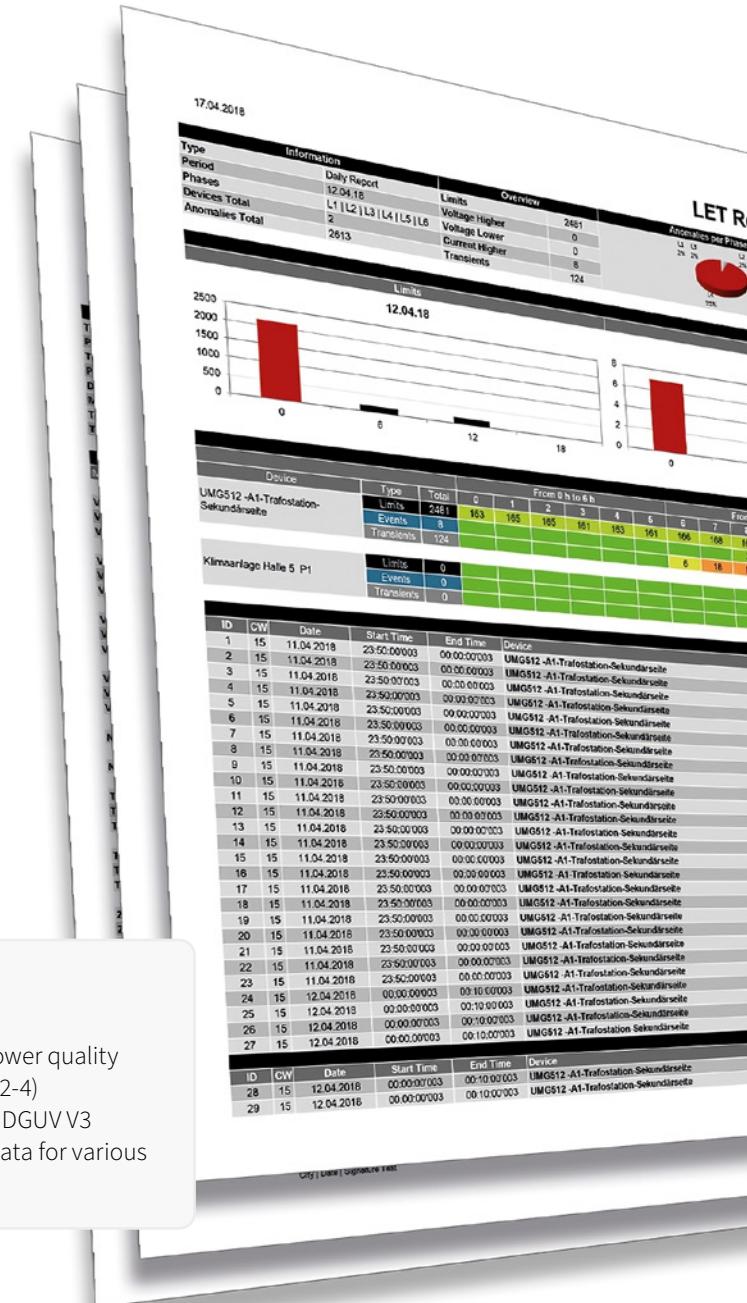


DATA IMPORTS

- 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

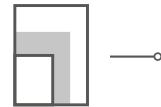
COMPLY WITH STANDARDS

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



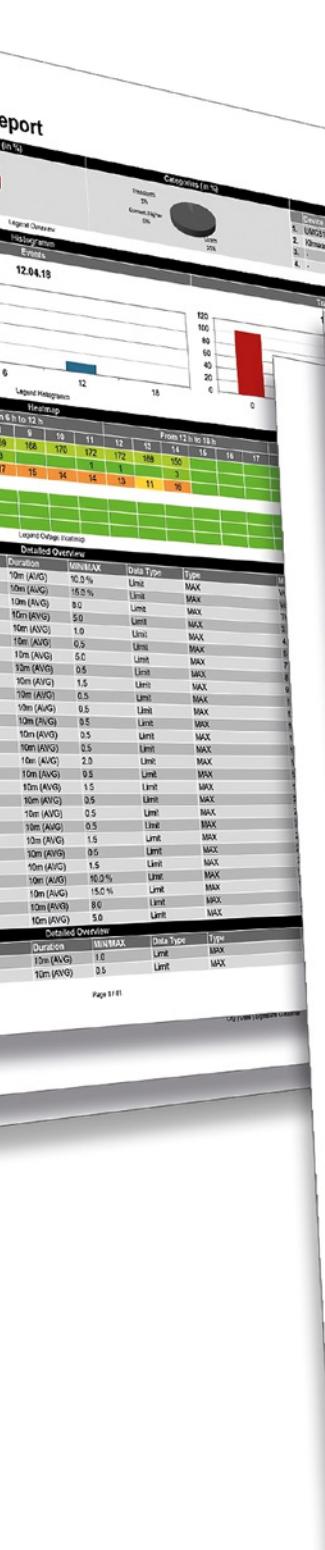
STANDARDS

- 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



ALARMS

- Easily set and monitor limit values
- Immediate information, e.g., via email, in the event of failures or limit value violations
- Ensuring device communication and data retrieval/readout



Powerquality-report according to EN61000-2-4

Customer
 Name: Max Mustermann
 Company: Janitza
 Location: Lathau

Auditor
 Name: Max Mustermann
 Company: Janitza
 Start date: 01/10/17 00:00
 End date: 31/10/17 23:59
 Date: 22/10/17 10:09
 Software: Janitza-Gridvis 7.3.0-SNAPSHOT(23)



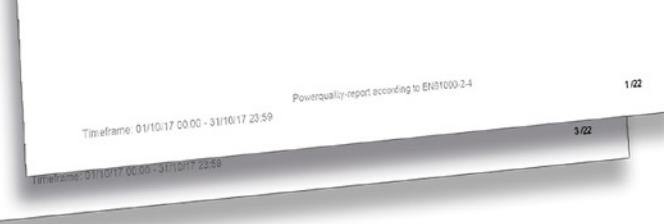
Gesamtverbrauch Halle 6
 Device type: UNO 511
 Flicker: Supported
 Events: Supported
 Transients: Supported

Summary

	Result	Recording Vacancy
Voltage effective L1	Passed	0.25%
Voltage effective L2	Passed	0.00%
Voltage effective L3	Passed	0.00%
THD U L1	Passed	0.00%
THD U L2	Passed	0.00%
THD U L3	Passed	0.00%
Unbalance Voltage	Passed	
Harmonics voltage (rel.) L1	Failed	
Harmonics voltage (rel.) L2	Failed	
Harmonics voltage (rel.) L3	Failed	
Undervoltage		

DOCUMENTATION

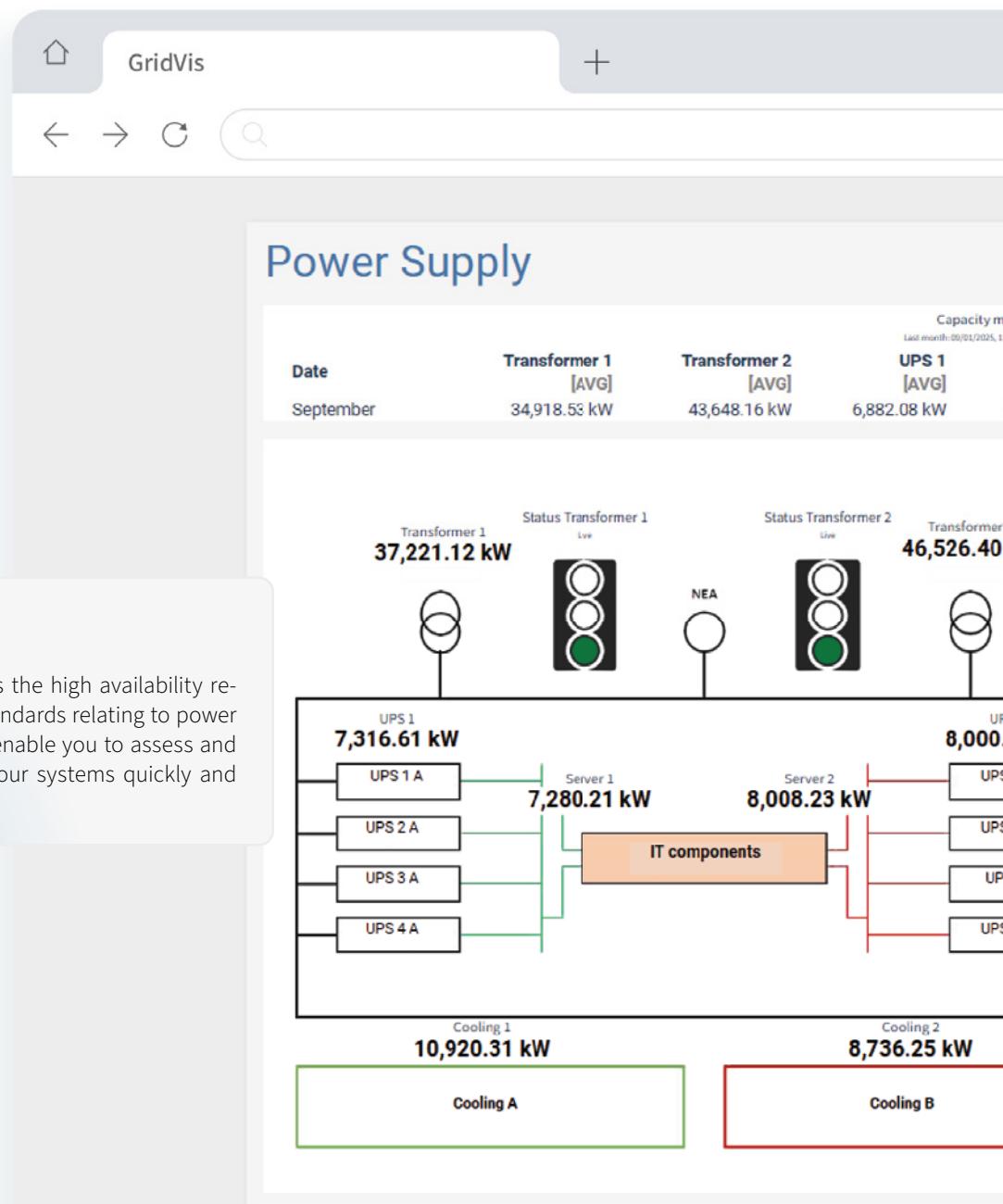
- Generate evaluations according to selected standards at the touch of a button
- Create ready-made reports and templates
- PDF for digital storage or printing

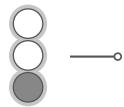


ENSURE HIGH AVAILABILITY

GridVis® helps you detect power quality disturbances and monitor your residual currents. The alarm system allows for a quick response to deviations and limit value violations. This

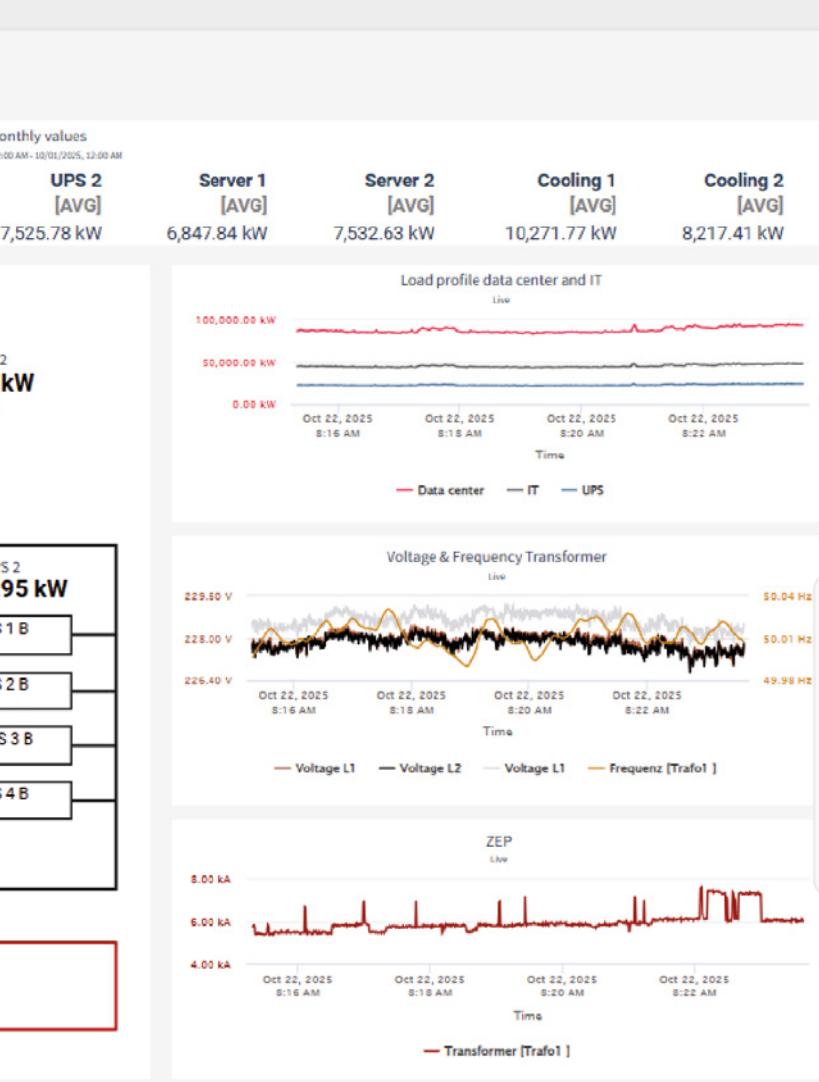
enables immediate action to prevent breakdowns, damage, and unnecessary wear and tear. You can also use the tools to uncover the root causes of events.





CAUSE ANALYSIS

The various analysis tools, such as the event browser, enable in-depth 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 the event 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.

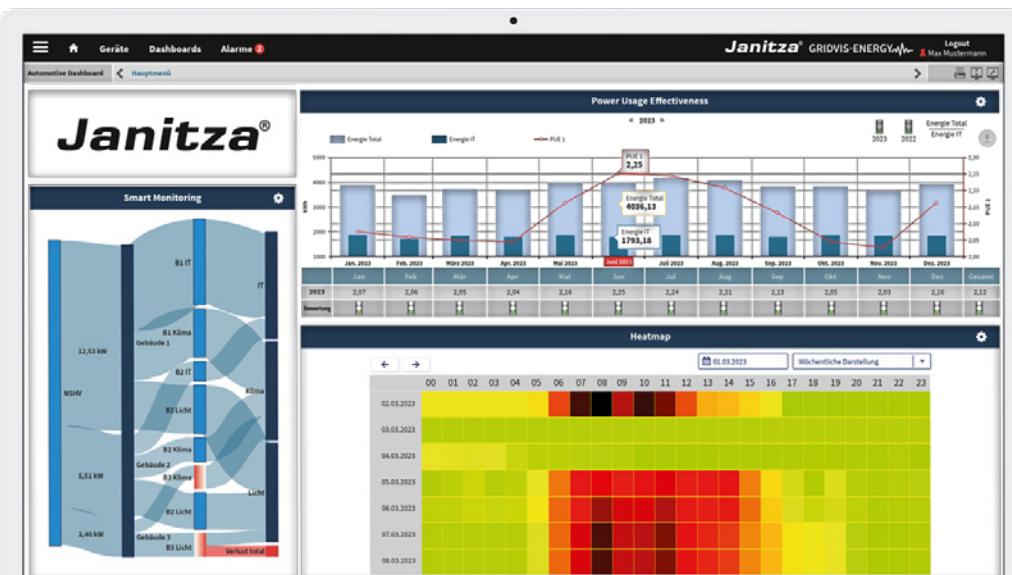
The Power Grid Monitoring Software ensures high availability in your systems by detecting potential faults at an early stage.

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 businesses to large manufacturing plants, data centers, airports, and major 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 depends entirely on a reliable power supply and maintaining the required grid compatibility level. 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 for daily 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

Industry must handle various challenges. Whether it is about energy management according to ISO 50001, security of supply, or the recording of CO₂ 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. This is how to evaluate the CO₂ 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:

- Evaluating and monitoring CO₂ emissions
- Conducting comprehensive consumption analyses
- Sustainably reducing energy costs
- Creating comprehensive transparency
- Creating 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 necessary 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 point of contact for questions or problems.

Rely on an integrated solution that simplifies your workflows and boosts your energy efficiency. Our system provides the assurance that everything will run smoothly, allowing you to 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 a 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®, including various training courses designed to teach you 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 comprehensive energy measurement solutions that ensure transparent energy flows and monitor power quality. The global company, headquartered in Germany, provides individual solutions to meet specific customer requirements across a wide range of industries, including data centers, manufacturing, buildings & infrastructure, utilities, and renewable energy.

PRODUCT RANGE

Janitza's portfolio includes innovative measuring devices and the perfectly integrated Power Grid Monitoring Software GridVis®, complemented by high-quality components. Customers worldwide benefit from solutions in energy data management, power quality monitoring, and residual current monitoring, all within a unified system environment – Made in Germany.

HEADQUARTER

Janitza | Germany

Vor dem Polstück 6
35633 Lahnau
Phone: +49 6441 9642-0
Email: anfragen@janitza.de

www.janitza.com

GLOBAL

Janitza | USA

Phone: +1 888 526 4892
Email: sales-us@janitza.com

Janitza | Austria

Phone: +43 7942 214 966 194
Email: anfragen-at@janitza.com

Janitza | Mexico

Phone: +52 56 6674 4808
Email: sales-mx@janitza.com

Janitza | Australia

Phone: +61 411 544 114
Email: sales-au@janitza.com

Janitza | UK

Phone: +44 7939 697 434
Email: sales-uk@janitza.com

Janitza | India

Phone: +91 900 387 6980
Email: sales-in@janitza.com

Janitza