

DATA PORTAL



A professional and economical alternative
to standard SCADA systems dedicated
to telemetry solutions

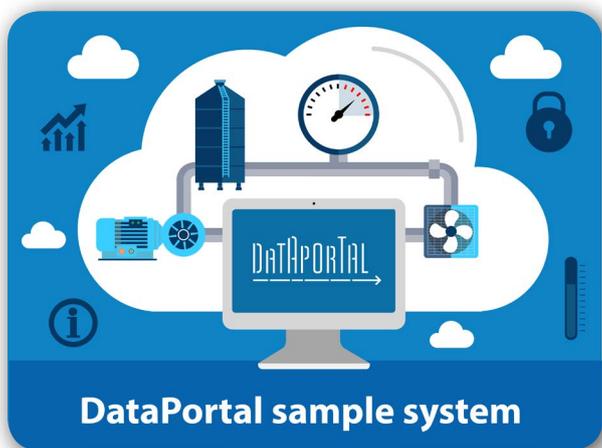
inVentia



DATA PORTAL

DataPortal is a data visualization system designed as a remote service and operating in a safe cloud computing environment. To use DataPortal, i.e. to create and display screens with animated graphics, nor additional external software, nor additional licenses, nor specialized hardware acting as a data server are required. DataPortal service processes, such as collecting data from devices, and their processing and analysis, as well as providing the prepared screens to the recipient, are under continuous control of the system.

DataPortal is a stable and secure environment for small, medium, and large systems. To start working in DataPortal it is necessary to have the Inventia telemetry module and know its serial number and IMEI. One module entitles you to set up one account, but many modules can be attached to each account, enabling the creation of even very large telemetry systems with visualization using any device with a web browser.



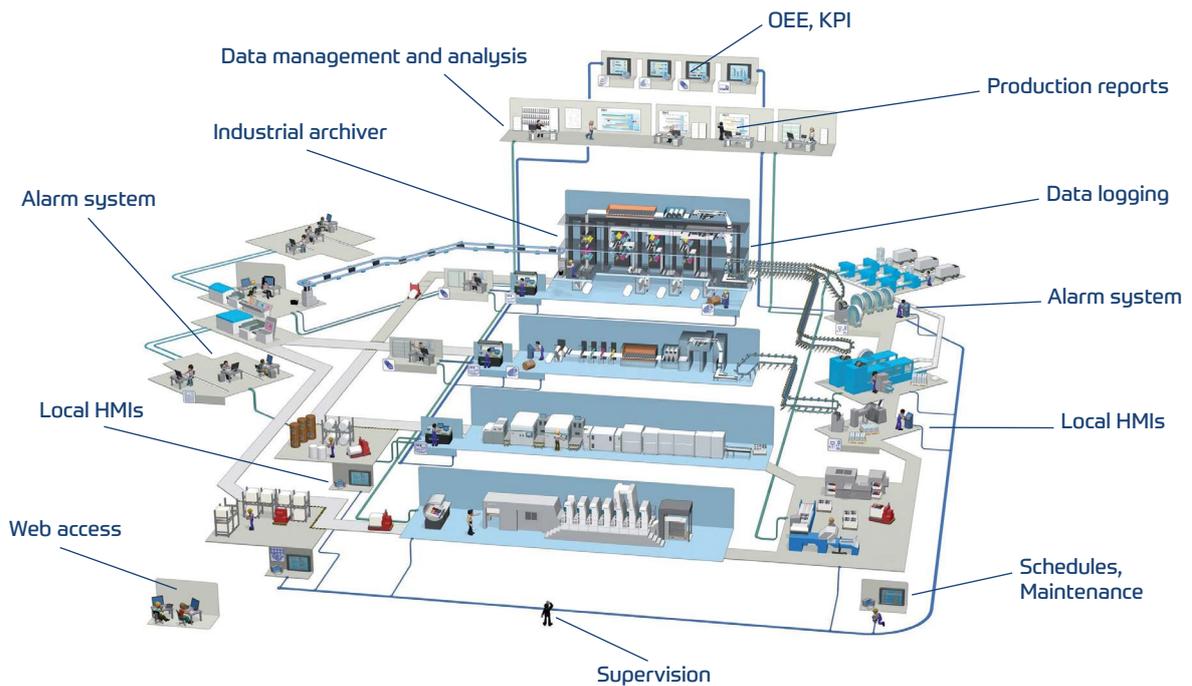


Proprietary SCADA system



The DataPortal system is used for:

- remote supervision of objects
- visualization of data from telemetry modules on animated synoptic screens
- transforming of input data into the information that is presented in a transparent and easily interpreted way
- archiving of selected data
- reporting and analysis of collected data
- alarming and notifying about critical states, e.g. about exceeding the set alarm thresholds
- configuration of selected telemetry modules
- data buffering and transferring it to other systems
- access to information in a secured cloud



The new generation of industrial software

Benefits of a cloud solution:

- presentation of data in an individual graphic form defined by the User
- many simultaneous users with different permissions under one account
- preview on devices of various types via web browsers or a dedicated application
- automatic scalability as the system grows
- cost savings related to the building and maintenance of own server infrastructure
- alarming with notification via e-mail and/or SMS
- non-stop 24/7 operation of the system, even when the operator logs off
- monitoring and control through animated screens
- billing with the use of system components



Examples of DataPortal system applications:

So far, with our users, we have implemented, among others:

- control and monitoring of hydrophore and sewage pumping stations
- monitoring of electricity generation in wind farms and photovoltaic installations
- predictive monitoring of electrical switchboards with an SMS and e-mail notification system
- controlling and monitoring the operation of power generators in emergency power systems
- monitoring of parameters in cathodic protection stations
- monitoring of the level of surface and ground waters
- distribution of data about the extraction of lignite from mines scattered around the world to the client's server
- monitoring of leaks in district heating systems
- graphical reports of water consumption based on the remote reading of water meters
- liquid parameters monitoring system with notification of exceeding the permissible standards
- monitoring and remote control of the operation of sewage pumping stations
- monitoring of pressure booster sets and pressure boosting stations
- monitoring of water and wastewater flows in the water and sewage industry for billing purposes
- pressure control on water mains
- water level control in tanks
- monitoring of water treatment plants and treatment plants
- monitoring of mushroom cultivation parameters



Data visualization at your fingertips



■ Manage, Design, Run

Depending on the user profile, we offer in one environment the tools for managing the account, project, users, defined resources (Manage mode), creating animated screens and transitions between them (Design mode), as well as running the built animated visualization on the full screen of a web browser (Run mode). Log in to your DataPortal account and start building your application!

■ 24/7 non-stop operation

The offered DataPortal system resources ensure non-stop work, even when the operator logs off. During this time, data is continuously collected and subjected to initial analysis. In case of an emergency, the system will immediately generate notifications to defined recipients. There is no need to continuously follow the monitor screen and having the user actively logged in.

■ DataPortal is always at hand!

The free DataPortal mobile application allows you to easily access your account resources on any device with the Android operating system. The system ensures efficient switching between your projects. This enables quick data preview and process control from a desktop computer or mobile device.

■ Data visualization on animated synoptic screens

This is the basic function performed by the DataPortal system. Data recorded by measuring devices are converted into information, also in graphic form. It can be a graphic created from the available tools in the design mode, from ready-made container objects, as well as other graphics or drawings imported from the outside in SVG format.

DATA PORTAL ↑

System stability and reliability

Processing of input data

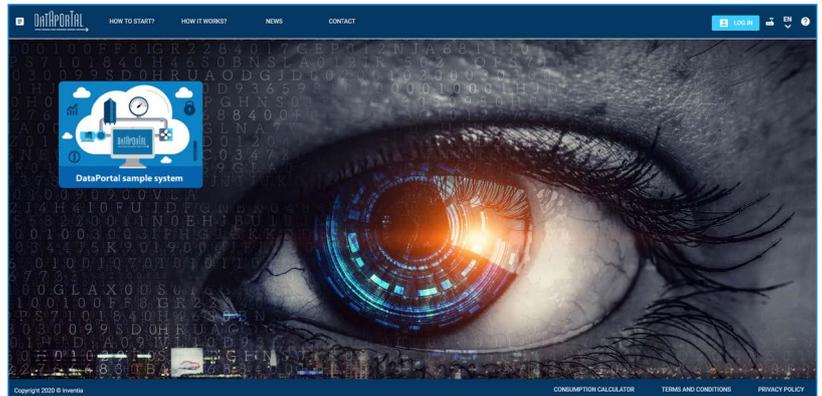
Measurement data flowing to DataPortal, in addition to recording, can also be mathematically or logically transformed. New data recorded in a converted form are ready to be presented on synoptic screens, ensuring access to information.

Perfect for small, optimal for large projects

DataPortal maintains efficient operation both for small implementations and complex projects. It ensures optimal operation regardless of the addition of new resources, the increasing number of users, or the increasing volume of processed data.

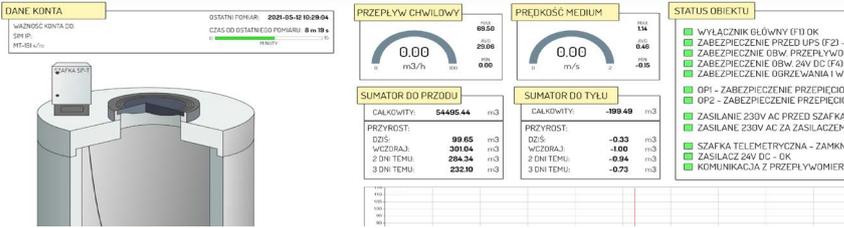
Documentation in Polish and English

The intuitiveness and freedom of using the DataPortal system is not everything! The offered product has extensive and constantly updated documentation, currently kept in two languages: Polish and English.



Good practices supported by a certificate

Design, production, and distribution are covered by a certified Quality Management System following ISO 9001:2015. The standard requires us to constantly improve our activity. We are not afraid of challenges and innovative projects.



DataPortal system packages

Choose your DataPortal plan



COMFORT

for companies without their development resources, who value comprehensive service as well as simple and transparent billing methods (fixed subscription fee billed once a year). Design and implementation support remain with Inventia.



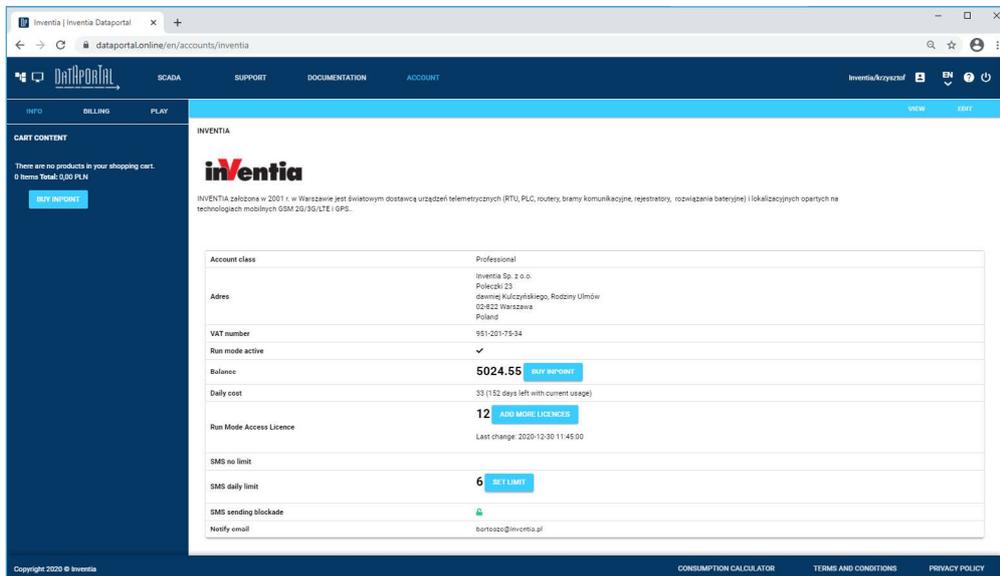
PROFESSIONAL

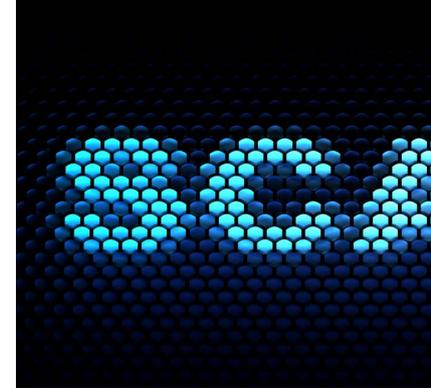
for system integrators and companies with their designers. It allows you to freely build a visualization using the available tools and graphic elements, manage user accounts, use a library of graphic elements or create your own. InPoint packages for using the system in the "pay as you go" mode (you pay for as much as you used). More about InPoints on page 17.

Try it for FREE today!

Each new account in the DataPortal system is automatically fed up with 90 inPoint units, used to test the system's capabilities. After using them up, you can decide to continue working with the system by topping up your account or use the Comfort package.

Don't hesitate! Contact us today! Customer support office: tel. +48 502 056 503.





Project and data management

Individual login page

DataPortal enables logging in to the system from the level of a web page adjusted independently to each account. Such a dedicated web page is available at an individual website address. The integrator profile has access to the login options settings, where you can quickly personalize the standard login page and give it a more personal look using an HTML editor. We encourage you to experiment!

Sharing projects between accounts

The built-in integrator account makes managing multiple accounts a breeze! This profile enables the creation, management, and settlement of dedicated, individual sub-accounts within the platform, which are linked within the parent account, i.e. the DataPortal integrator account.

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 WYKRESY
 ZAMKNIJ

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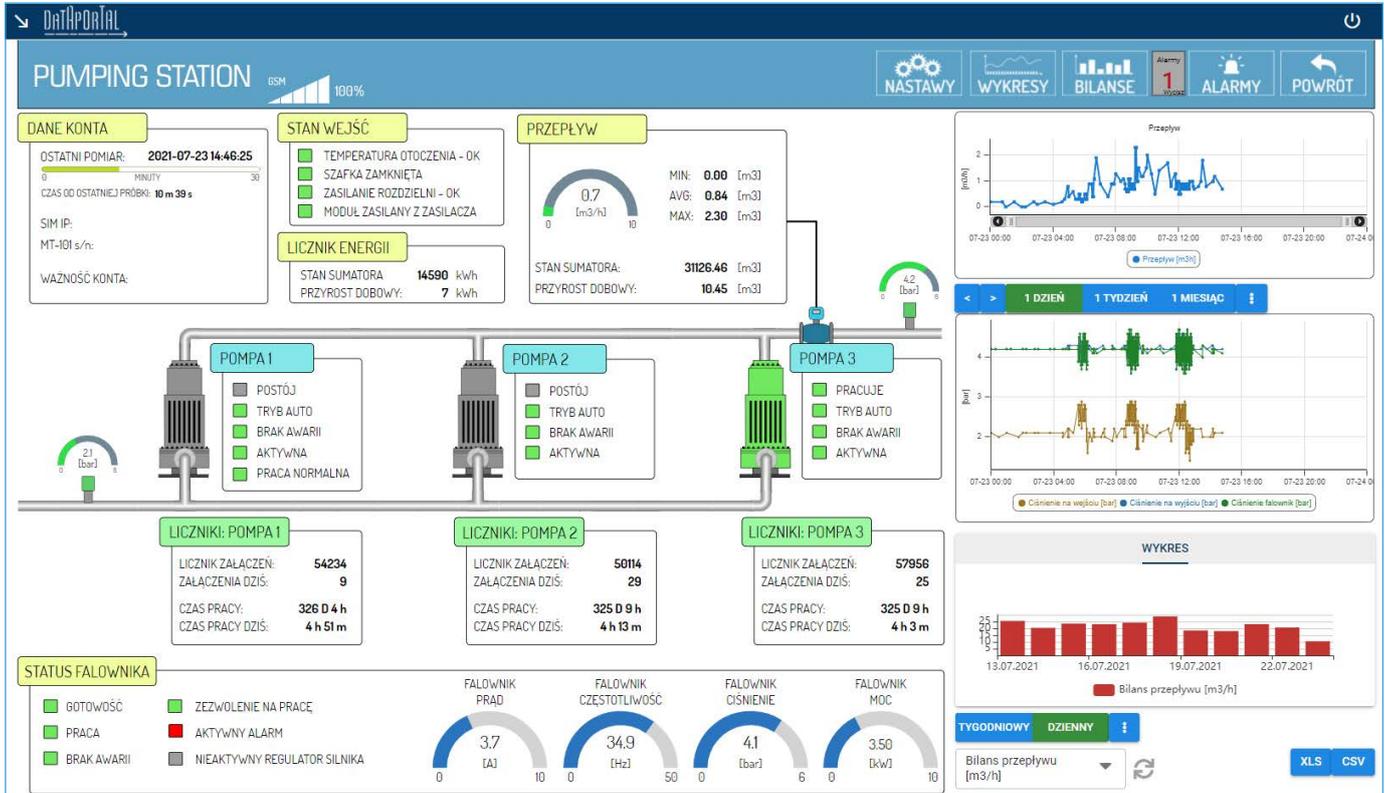
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Project and data management



Configuration of MT/ML modules

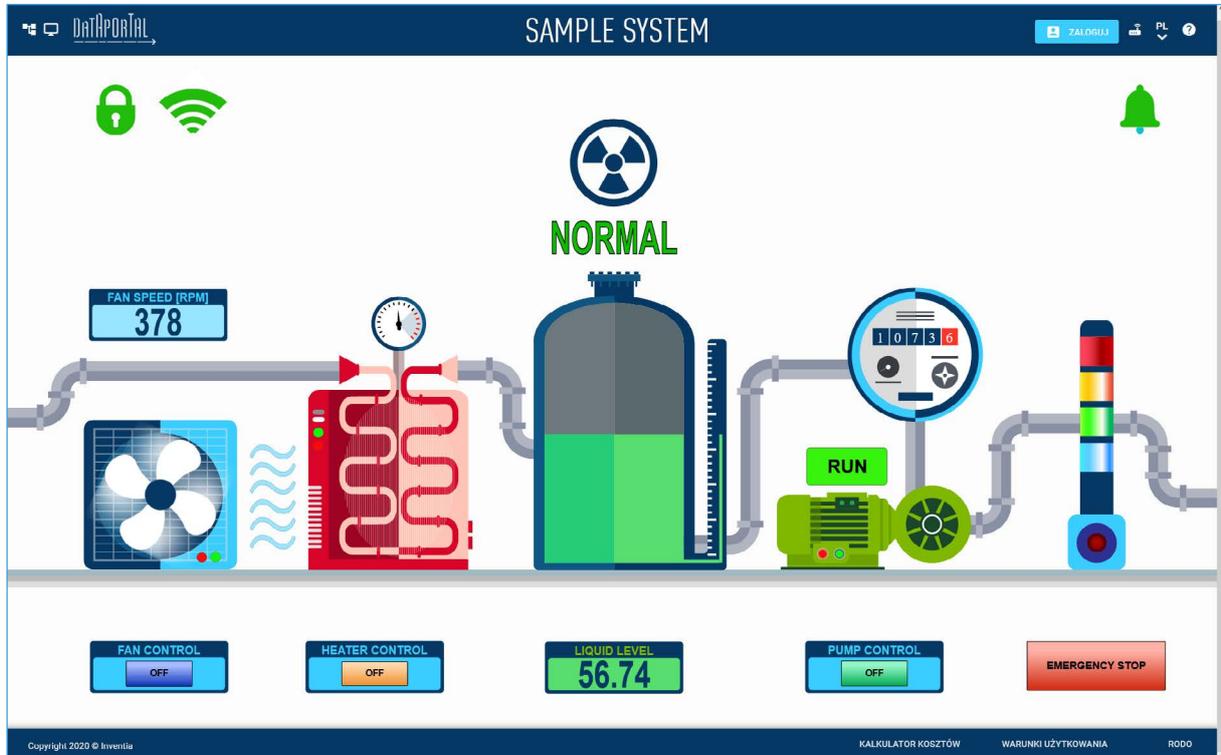
DataPortal has been adapted to manage the configuration of distributed devices. This function is performed using the configurator in the web browser. Both AC and battery-powered devices are supported. Especially with battery solutions in mind, service has been developed that automates the configuration of the device according to its operation schedule, so that the user does not have to wait for the device to wake up. It changes the configuration once and the system takes care of its application.

Data Retention

The storage of archive data is based on database solutions. Both relational and non-relational databases were used in the system. Such a diverse environment allows us to propose an extremely efficient, fast, and safe solution. Data retention is individually configured for a single process variable. This allows you to build an optimal center for collecting data from the monitored process, ensuring the security of the user's data.



Archival data



Local simulation variables and a demo screen

DataPortal offers local simulation variables that generate repetitive waveforms of random values and predefined values. This allows the user to simulate the behavior of the application being created without connecting the device! Based on this data, we have prepared a sample animated screen that allows you to familiarize yourself with the capabilities of the DataPortal system. When creating your account, you can import such a screen with all its content and analyze in detail what elements it was made of, treating it as a template for creating your application. See <https://dataportal.online/en/sample-system>



Analysis and presentation of archive data on synoptic screens

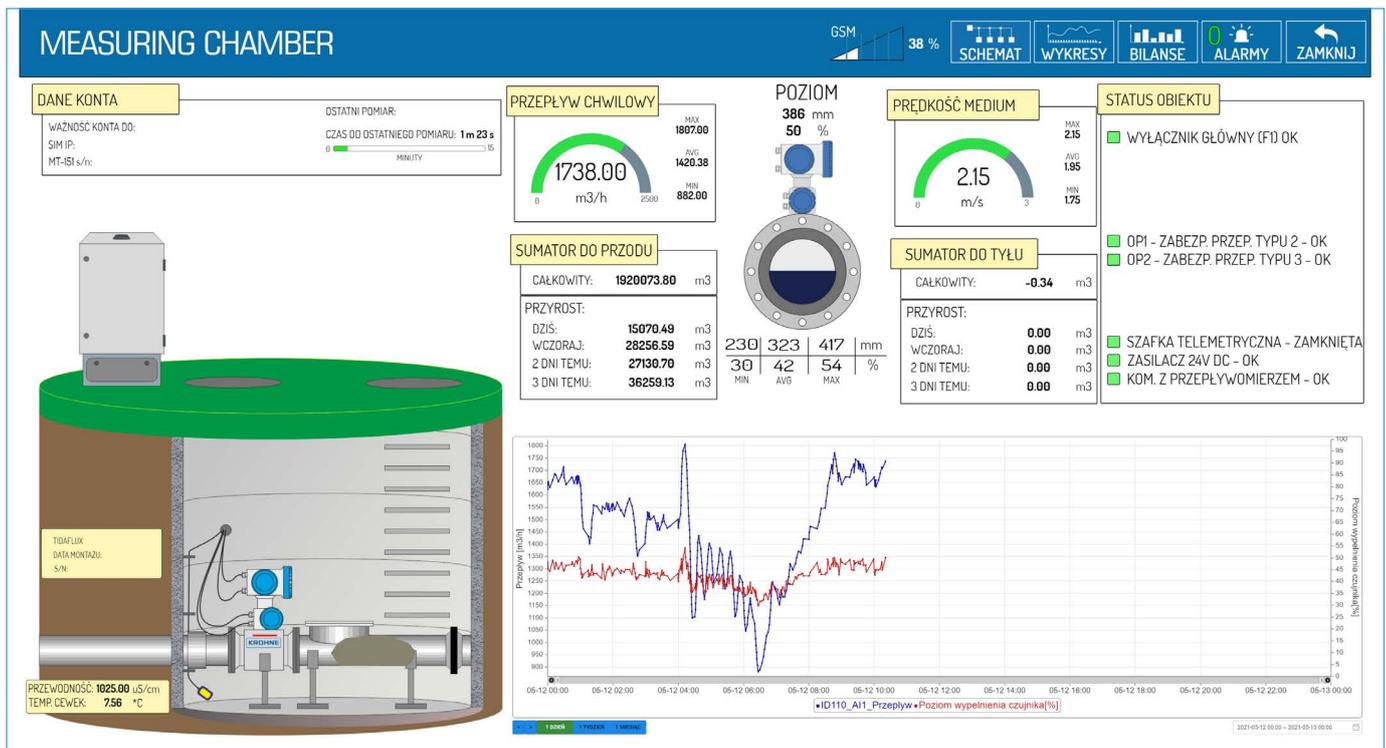
Ready-made elements such as tables, charts, or balances available in the toolbox provide extremely simple solutions for the presentation of archive data. The next step is to build the report screen according to your own needs and imagination. An additional advantage is the ability to perform simple calculations and presentation of the average, minimum, maximum, difference, and other values in a selected interval, using the intuitive calendar properties.



Process variables

Variable group editor

The editor of variable groups reduces the time of creating the application in a situation when the monitored objects are similar to each other. It is possible to use the same screen to present data from different locations. This allows you to reduce the costs of application development and system maintenance.



Various types of process variables

DataPortal has four types of process variables: external (current value), calculated (value processed according to the user's formula), local and virtual. Only external variables are taken into account when calculating the consumption of InPoint units. The other variables' usage is free of charge!



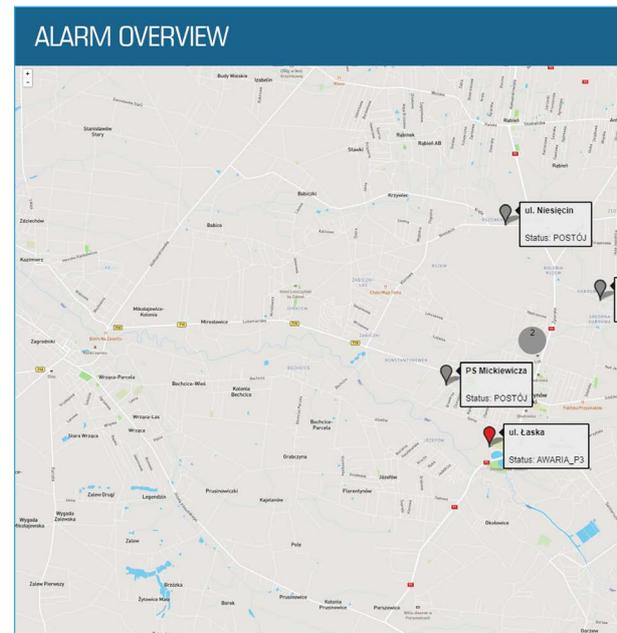
Graphical presentation of data

■ Scalable Vector Graphics (SVG)

Graphics in the system remain crisp and scalable despite different resolutions or multiple zooming. The screen is ideally suited to all types of devices, from smartphones to laptops and large screens of large-format graphic walls in dispatch centers.

■ Intuitive editor for creating graphics

As part of the DataPortal account, we offer an intuitive editor for creating vector graphics. All you need to do to build your first screen is arrange the objects on the screen and define their properties. With the help of available animation scripts, you can further enrich and personalize the application.



■ Library of ready-made graphic elements

Don't you want to spend time designing graphic objects from scratch? Do not worry! Check out our container of ready-made graphic elements! The prepared library consists of commonly used industrial devices, such as tanks, pumps, indicators, valves, lamps, switches, and others. The applied vector format of the objects allows freedom in their possible scaling. You can resize an object to fit your drawing without losing details. Importantly, ready-made elements can coexist with those drawn on your own.

■ Import of external graphics

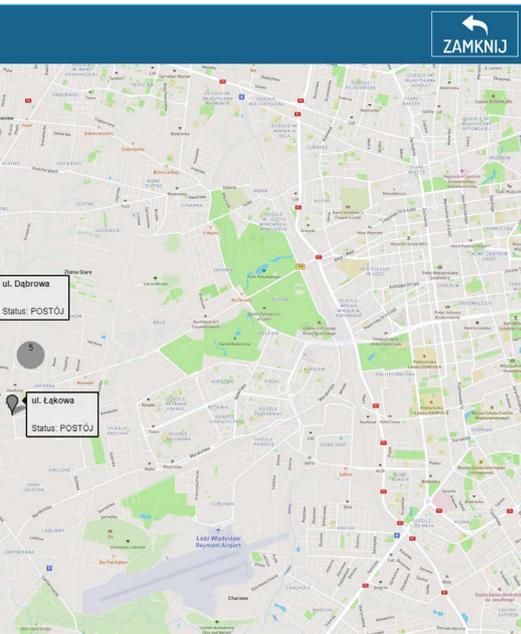
In addition to built-in symbol libraries, DataPortal also allows you to import ready-made drawings made with external programs. Files containing graphics should be saved in SVG vector format.



Graphical presentation of data

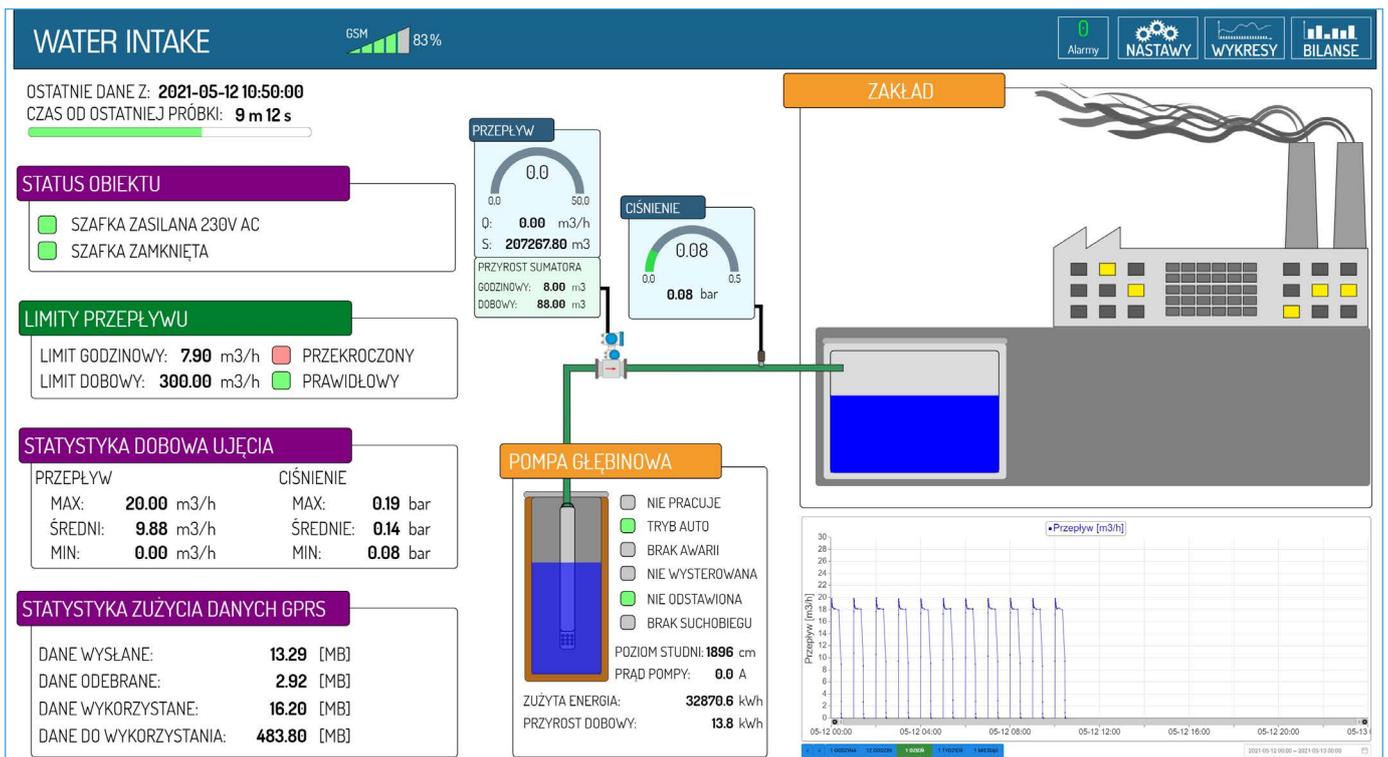
Spatial distribution of objects on the map

DataPortal offers a ready-to-use map control that allows you to build a synoptic screen with the spatial arrangement of objects. The color of each of the map markers, symbolizing a given object in the field, can be individually animated, depending on the value of a single variable or a complex expression. Additionally, you can use a script which, after selecting an object from the map, will allow you to change the presented screen, displaying e.g. details of the object.



Expression generator

DataPortal provides a generator of arithmetic and logical expressions directly when creating a variable calculated with a defined formula. Thanks to this, it is possible to process raw data to extract information useful for the user and present it on the screen.





The highest level of SCADA application security

■ Best practices and modern technologies

Our programmers follow new technologies, their development, and the opportunities they can offer. Proven mechanisms and recognized IT standards were used in the building of the system, as well as in its subsequent optimization.

■ Remote and fully secure access to the system

Thanks to the implementation of HTTPS, SSL, and other data encryption mechanisms, network communication is fully secured. Remote access to resources allows you to monitor and control the process from anywhere, maintaining full control over the data.

■ Data hosting

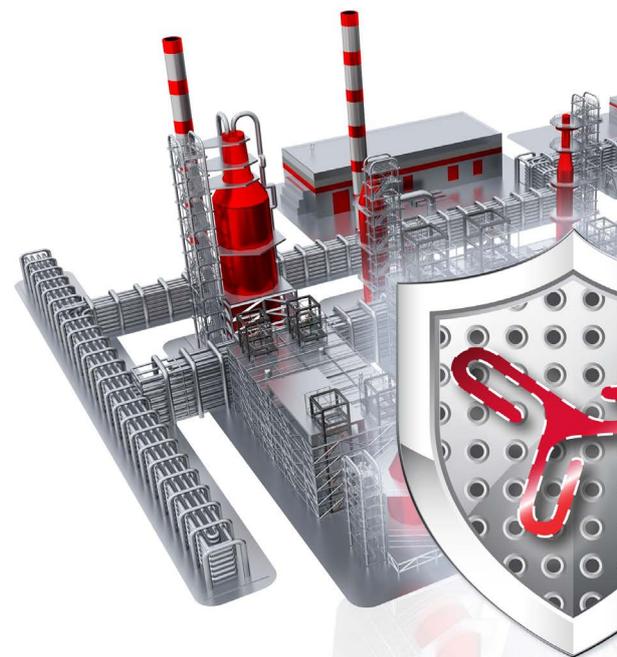
The DataPortal system is also adapted to the implementation of tasks where there is only a need to collect measurement data, and the requirements do not include the need to build synoptic screens. Perhaps it will be enough to preview the values collected in the form of a table. The collected data can be shared as comma-separated files (CSV). Data hosting is ready!

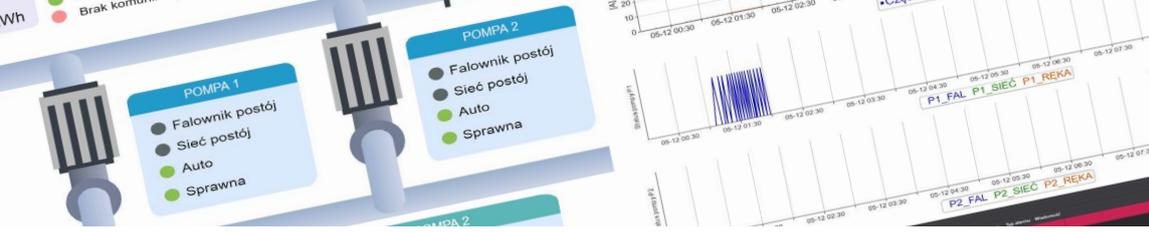
■ DataPortal as a data gateway for other systems and applications

DataPortal is not only a platform for collecting, processing, and visualizing measurement data. It also enables communication with external systems, also in real-time, using standards such as OPC UA, MQTT, FTP, CSV, XML.

■ We provide free updates

New functionalities are added several times a year. You have the guarantee that your system is up-to-date and you can use all its functions without restrictions or additional investments.





Benefits and Costs

■ No license required

Working with the DataPortal system is not limited by any additional licenses. The product works on all operating systems. It requires the use of a standard web browser without installing any additional plugins.

Forget about limiting the number of variables and start building your app today! Grow it without any limits!

■ No upfront costs, no end up costs

The DataPortal system has many advantages and features characteristic for advanced SCADA systems. Additionally, there is no need to use external software or to have specialized hardware acting as a data server. We provide automatic updating and continuous product development to enable you to enjoy its use.

■ No contracts and clear regulations

No separate agreement is required to use the DataPortal System. The transparent and available online regulations at <https://dataportal.online/en/legal> define the rules of its use.



■ Costs control

The built-in billing module allows you to control the current costs of using the system on an ongoing basis. The transparent interface makes it easier for the account administrator to make decisions and optimize costs, also ensuring the possibility of self-recharging the account, if necessary.

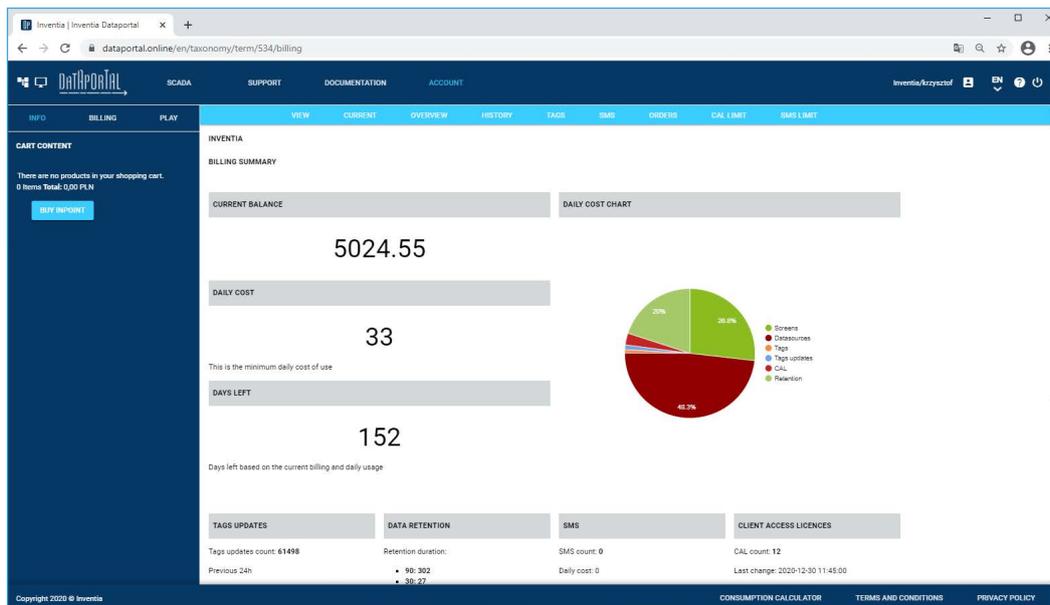




Benefits and Costs

InPoint billing units

InPoint is an internal billing unit of the DataPortal platform available in the PROFESSIONAL plan. Its use is carried out according to the “pay as you go” mode (you pay for as much as you used), where the user pays only for the used elements of the system. Attractive in price and diversified in terms of the number of InPoint units packages have been prepared. More information can be obtained by contacting the sales department, phone +48 502 056 503.



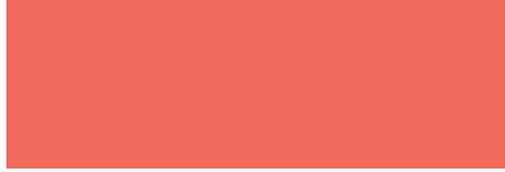
Calculator for the use of InPoint units

A calculator is available at <https://dataportal.online/en/billing-calculator> that allows you to estimate the amount of InPoint units available in the PROFESSIONAL plan depending on the assumed use of the DataPortal account.



We accept various forms of payment

The DataPortal online store allows you to purchase InPoint packages yourself, conveniently and at any time, without having to wait for the administrator’s help. Thanks to online payments, you will get an immediate top-up of your DataPortal account. We also implement traditional forms of purchasing InPoints based on orders paid by bank transfer.



Recipe for your visualization

■ Required: telemetry module, SIM card, idea and a bit of time

1. Register your account in the DataPortal system, using one of your telemetry or location modules
2. Define the object from which you will start collecting data
3. Add variables ensuring you full control over the object
4. Create your friendly screen using ready-made items from the toolbox or build it from scratch according to your imagination
5. Add other users to your account so that they can admire the results of your work
6. Share the system with them wherever you are

Fast, cheap and professional!

- ➔ No limit of objects!
- ➔ No variable limit!
- ➔ No screen limit!
- ➔ You pay for what you used!





Technical Support

DP EXPERT



■ Technical support from experts

As part of the DataPortal system, you will receive free technical support. Our advisers are available through the hotline operating from Monday to Friday from 8:00 a.m. to 4:00 p.m. and through the built-in technical support module. You will receive a reliable and comprehensive answer to bothering questions and doubts. The quality of our service is confirmed by the opinions of our clients:

„I found your Technical Support exceptional, one of the highest level of service I have ever come across, always prompt with explanations and answers to some of the issues I had, even the language difference wasn't an issue, outstanding professional service.“

Rob Johnson, Deblec Control Systems Ltd.

„The Control System company would like to thank the DataPortal Product Support Department for professional and substantive assistance in creating applications based on DataPortal WEB SCADA. Over the last 12 months, the Control System team has implemented over a dozen applications based on the DP system. Due to the complexity of the monitored objects, the necessity to increase the functionality offered by the DataPortal product has arisen many times. The InVentia Support Department reacted dynamically to all comments we reported. Particularly noteworthy is the extraordinary speed of response to the needs generated by the Control System team and the help of the InVentia DP Support Department in creating new applications. Communication between the teams of both companies was and is still exemplary. After 12 months of implementing projects based on DataPortal WEB SCADA, we evaluate this product very positively, and its attractiveness is additionally increased by the help offered by InVentia“

Maciej Sawicki, Control System



INVENTIA applies
a certified Quality
Management System
ISO 9001:2015



July 2021



Become our business partner!

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or write: dataportal@inventia.pl

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