



FRIGODATA SOLUTIONS

Data management for every demand



A SYSTEM FOR EVERY CASE

PLANT MONITORING WITH WURM SOLUTIONS

Energy efficiency, operating costs and security are key issues for running your plant. Plants optimised for energy are not only cost-saving but also make a significant contribution to climate and environmental protection.

In order to evaluate the energy efficiency and the performance of your plant(s) you need to have a complete overview – of a single project and of a branch network.

At the same time, you need to know immediately whether and where a fault is detected. From time to time, you will also want to see detailed data from a single market.

Particularly if you work with a system solution which comprises refrigeration, climate, lighting, air condition, heating and peak load optimisation, transparency is a demanding task.

We provide you with the instruments for a comprehensive monitoring around the clock and climate-protecting plant operation.

Whether as software for the PC, an internet application or an app for your mobile device – with our solutions you have everything under control: parameterising, visualising, documenting and alarming; if needed, independently of location and time via remote data transmission with mobile devices.

This brochure gives an overview of the essential components of our solutions for efficient plant monitoring.

Our specialists will be pleased to answer any questions you have or provide further information.

ON TOP OF THINGS AT ANY TIME

CONTROL AND MONITORING – ALWAYS AND EVERYWHERE

More than 300 million new data sets from the plants connected to the Wurm data system are provided per day. As a central switching station, the Wurm COM-CENTER connects this system data reliably with the monitoring tools.

The data exchange with numerous plants with Wurm technology has already been done for a long time via VPN connections. This means that our customers are well prepared for the upcoming conversion of all telecommunication connections to Voice over IP (VoIP) and the discontinuation of analog technology.

Our DATA CENTER provides maximum safety, for it is based on our own redundant servers with uninterruptible power supply.

To access the data of your system you can use the following main ways: FRIGODATA XP, which can

also be used as a local single PC solution at your site, allows monitoring and analysis of all your projects, which are accessible via remote access. For mobile use the practical service and market app Frida enables targeted searching for your projects and operation down to the last detail.

FRIGODATA ONLINE, as a web solution, provides platform and location independent analysis and a comprehensive project set comparison on a variety of projects. The FrigoDoc Xpress application extends the functionality with handy features.

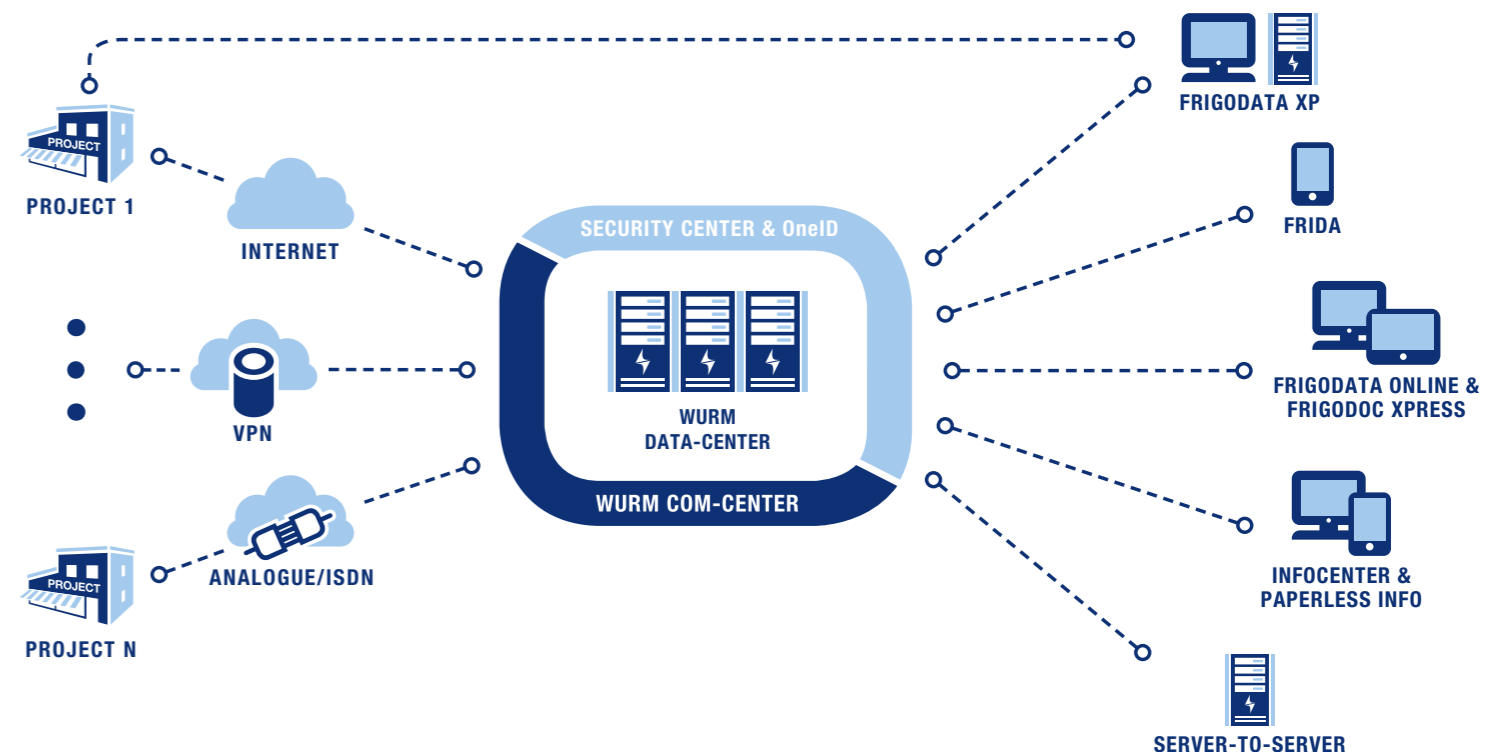
Our Server-to-Server web service enables data transfer from plants with Wurm devices to external systems.

The entire deployment and access to system data are done by the Wurm Security Center with a claim to the highest possible data protection.











As the central access management it ensures authorised access according to the specific assignment of rights.

Based on this sophisticated architecture, the OneID app provides the opportunity to perform authentication for all applications via a mobile device bound to your user identity.

Even our solutions for providing technical information and documentation, such as the Wurm Infocenter and the paperless info app, are reliably protected by the Security Center.



THE RIGHT TOOL FOR ANY REQUIREMENT

	Single project 				Project set   	
	Commissioning 	Plant operation 	Emergency 	Continuous improvement 	Plant operation 	Continuous improvement 
FRIGODATA XP (PC software)	Setup & parametrisation, Oscilloscope function, h, log (p) – chart	Process visualisation, detailed analysis functions	Fault management & alarming	Frigotakt+ overview, track assignment, plot data evaluation	Fault management, automatic data collection, communication surveillance	
Frida App (Smart Device application)	Setup & parameterisation on mobile devices	Mobile, extensive and fast access to plant data	Usage on the road at alarm receiving			
FRIGODATA ONLINE 2.0 (Web platform)		Extensive plant monitoring, project-specific evaluations	Alarm routing, root cause analysis with historical data	TÜV certified energy management according to DIN EN ISO 50001	Project set comparison & mass data analysis	Weak point & performance analysis, optimisation evidence
FridoDoc Xpress (Web platform)		Clearly structured HACCP analysis & documentation for refrigerated goods			Cross status analysis	
Infocenter (Web platform)	Technical documentation and further information, detailed document archive & revision history					
paperless info (Smart Device application)	Actual technical documentation, anytime, anywhere through offline functionality					

FRIGODATA XP



INTELLIGENT SOFTWARE IN CONTINUOUS DEVELOPMENT

Our PC software FRIGODATA XP has been used successfully by plant operators and service companies in the refrigeration and cooling sector for many years. It covers a wide range of plant management tasks, for example, the continuous and regular collection and processing of data and data recording.

FRIGODATA XP enables the user to parameterise his plants by remote monitoring and to visualise and evaluate collected data. Complete data recording supports detailed and precise temperature documentation according to HACCP. Further functions facilitate alarming.

With its comprehensive range of functions, the PC software is an effective instrument for the first commissioning of plants and continuous professional fault management. Apart from that, FRIGODATA XP is excellently suited for detailed analysis, as the software can use continuously updated measured data.

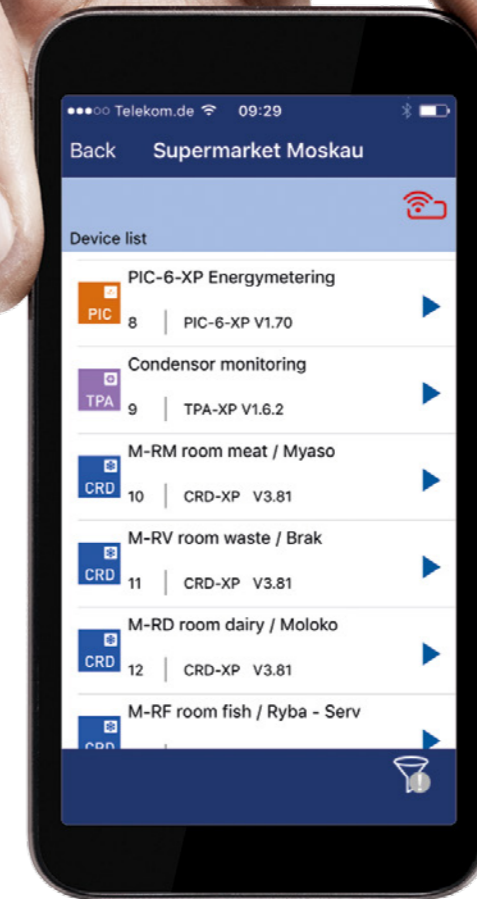
Thanks to enhanced network capabilities and the support of MS SQL servers with FRIGODATA XP, the integration of any number of stand-alone PCs with FRIGODATA XP in one network is possible.

The multi-client capability enables individual access for each user. This is the basis for a flexible system design, scalability and redundancy of the system.

Another advantage of FRIGODATA XP is the creation and integration of process pictures concerning the plant.

With its functions, FRIGODATA XP covers the wide range of plant monitoring tasks to a large extent.

We are continuously working on the maintenance and further development of the system. This means you will continue to benefit from a high degree of investment security.



Frida App

THE PLANT DISPLAY IN YOUR POCKET

With the Frida application for mobile devices you can create and edit projects independently of location. You can see all your devices on the CAN bus in the clearly structured device tree and navigate through their parameter sets. When required, the app can visualise a project down to the deepest detail level and you can change all adjustable values. Even large parameter sets are presented clearly and you can also benefit from clearly structured HACCP tables.

Different types of connection to the plant guarantee that Frida on your mobile device always has cur-

rent data: The access point CAN-AP is mounted in your project and enables wireless connection via Bluetooth® Low Energy (BLE). You can reach the plant via the internet anywhere else. In this way, all the plants can be contacted in the app in accordance with your user rights, if they are reachable via one of these ways.

The project can be set up in Frida as it is put into operation. Reading of device data enables fast navigation through a single project. The DATA CENTER enables even faster synchronisation for all project and device data, even when you are on the road.

The Frida App from Wurm is an efficient solution for mobile working practice: As service staff at the commissioning of a plant or a store manager within the daily monitoring tasks you will always have your projects ready and in clear view on the smartphone display.



www.wurm.de/frida



FRIGODATA ONLINE 2.0

INTELLIGENT SOFTWARE ALWAYS ON THE PULSE OF THE PLANT

FRIGODATA ONLINE 2.0 is an excellent instrument for mobile work. Independently of platform and location, the website enables you to process, evaluate and qualify even large amounts of data. Thanks to automated data collection and processing you achieve a transparency far above the information content of other solutions.

You can not only analyse a single project in every detail but also carry out a comparison of all projects included. Thus, you will get, for example, an overall overview on the energy balance of your markets.

With FRIGODATA ONLINE you can set up a live connection with a plant and see current data fast and comfortable in live mode.

The web platform supports you efficiently with the realisation of an energy management (EnM) according to DIN EN ISO 50001. This international norm, published in 2011, focuses on the worldwide reduction of energy consumption and greenhouse gas emissions and sets standards for the implementation of an energy management system. Plant operators should realise this in a Plan-Do-Check-Act cycle.

FRIGODATA ONLINE 2.0 provides you with a number of helpful EnM tools. For this, the BAFA (Federal Office for Economy and Export Control) listed our browser solution as "eligible energy management software" in 2015. Together with a large number of other Wurm devices, our web platform is also certified for energy management by the German TÜV.

HACCP evaluations not only provide you with data from the previous day – with FrigoDoc Xpress, inherent part of FRIGODATA ONLINE 2.0, you can see and analyse current temperature data whenever you need them.

For several years, our browser-based application FRIGODATA MOBILE has enabled the usage of FRIGODATA with mobile devices. You can benefit from clear selection lists of projects, controllers or malfunction and procedural messages.

FRIGODOC XPRESS

FAST CONTROL WITH A "TRAFFIC LIGHT CHECK"

For fast action in everyday use the practical online application FrigoDoc Xpress is the right solution for operators of plants for refrigerated goods (such as food or drugs). The main task of the application is HACCP-compliant temperature monitoring and documentation according to Regulation (EC) 37/2005. It combines the independence from location of FRIGODATA ONLINE and the timeliness of a local PC solution.

FrigoDoc Xpress ensures the location and platform-independent overview on the home screen by picking up the latest data in ten-minute intervals. Via the intuitive "traffic light check" you are

able to see whether your system is in good condition or critical conditions have arisen.

To offer maximum HACCP conformity, digital documentation is stored for 2 years in the Wurm DATA-CENTER. In addition, the acknowledgment function makes required documentation of internal operations possible paper-free.

If necessary, for all product groups you can define which monitoring methods should be used for them centrally. Configuration and maintenance via remote data transmission are part of the standard scope of functions of FRIGODATA ONLINE and are

extended by FrigoDoc Xpress with options to configure the monitoring functions. So onsite service calls are not necessary in many cases. Defrost and shutdown times are determined by the monitoring methodology, e.g. by a delayed resumption of measurements, and false alarms are prevented.



ALWAYS WELL INFORMED

COMMUNICATION ACCORDING TO YOUR NEEDS

If you have individual questions, the Wurm hotline will be pleased to assist you. Our competent colleagues will help you via phone and remote maintenance. Moreover, we provide you with various services to make the use of our control technology as convenient as possible for you.

Plant operators who need connections with various service partners can benefit from our time- and cost-saving Wurm Routing Service:

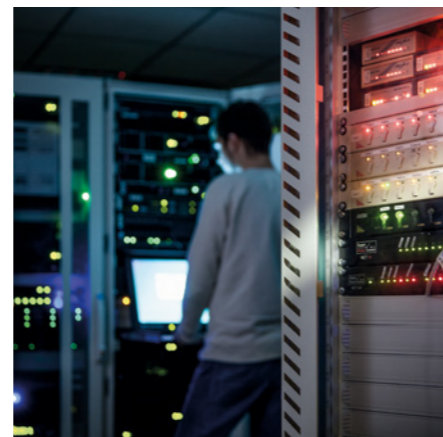
Instead of taking care of the implementation of various secure VPN solutions, you can use one single VPN connection to the Wurm COM-CENTER – we will take care of service and maintenance for a safely encrypted connection with all of your service partners.

If you need detailed descriptions and manuals on the devices you have in use, you can access this information at our web-based Wurm Infocenter at infocenter.wurm.de.

Even without a personal account you are able to access basic technical information on devices and software solutions. An adaptive search algorithm even enables the search for discontinued devices. Additionally, the Wurm Infocenter provides information on further subjects such as EMC and CAN bus.

With our paperless info app you have access to all important product information from the Wurm Infocenter that you may need for the operation and maintenance of your plant - anywhere, any time and even without any connection to the internet.

For data transfer from a plant with Wurm devices to external systems, our server-to-server solution is a convenient solution. We would be glad to advise you on the choice of solutions most suitable for your needs.



ADVANTAGES AT A GLANCE

TRANSPARENCY IN PLANT OPERATION

We provide you with instruments for comprehensive monitoring around the clock and climate-protecting plant operation. Whether as software for the PC, an internet application or an app for your mobile device – with our solutions you have everything under control: Parameterising, visualising, documenting and alarming. Your data is always stored safely – the Wurm Security Center aims to provide maximum data protection. With our OneID app you have the possibility to bind your mobile device to your personal user identity. This guarantees a fast and convenient access to all Wurm applications with maximum safety.

FRIGODATA XP

- The PC software enables the parameterising, visualising and evaluation of a plant's data via remote monitoring.
- With its comprehensive range of functions, the PC software is an effective instrument for the first commissioning of plants and continuous professional fault management.

Frida App

- Our native app, Frida for iOS and Android, enables you to create and edit projects at any time and place. If needed you can analyse a project data at the most granular level of detail.
- Via Bluetooth Low Energy (BLE) and the internet you can connect Frida with the plant at any time and place.
- A major advantage for practical use is the project database in the Wurm DATA-CENTER. Searching for and downloading single projects is quick and easy.

FRIGODATA ONLINE 2.0

- With our web-based software you can process and analyse data independently of platform and location.

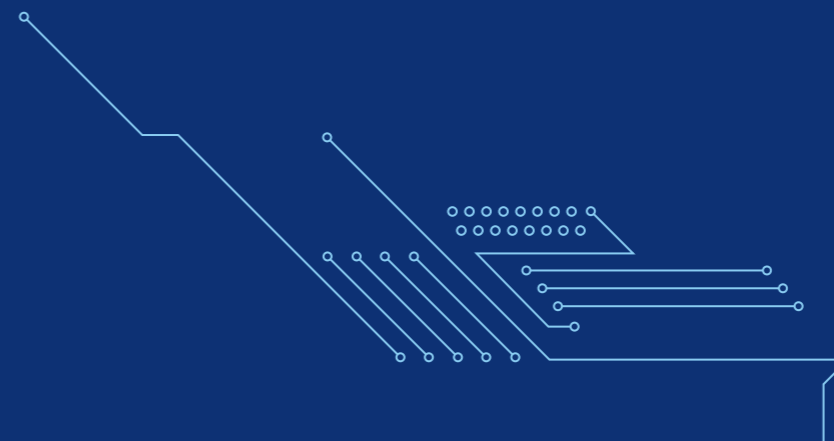
- Thanks to automated data collection and processing you achieve a transparency far above the information content of other solutions.
- Not only clear visualisation is a particular strength of FRIGODATA ONLINE 2.0, but also the possibility of carrying out a comparison of all projects included.

FrigoDoc Xpress

- For rapid action in daily business, our practice-oriented online application is the right solution.
- The "traffic light check" indicates at a glance if your plant is in proper condition – directly on the home screen.
- Thanks to automated data collection every 10 minutes, data are kept up to date, combined perfectly with independence from location.

Always informed

- Our team at the Wurm Hotline will be pleased to answer your specific questions.
- You will find technical documentation and further information at infocenter.wurm.de or in the paperless info app.





Wurm GmbH & Co. KG Elektronische Systeme
Morsbachtalstraße 30
42857 Remscheid, Germany

Phone: +49 (0) 2191 - 8847 300
Fax: +49 (0) 2191 - 8847 9300
Email: info@wurm.de