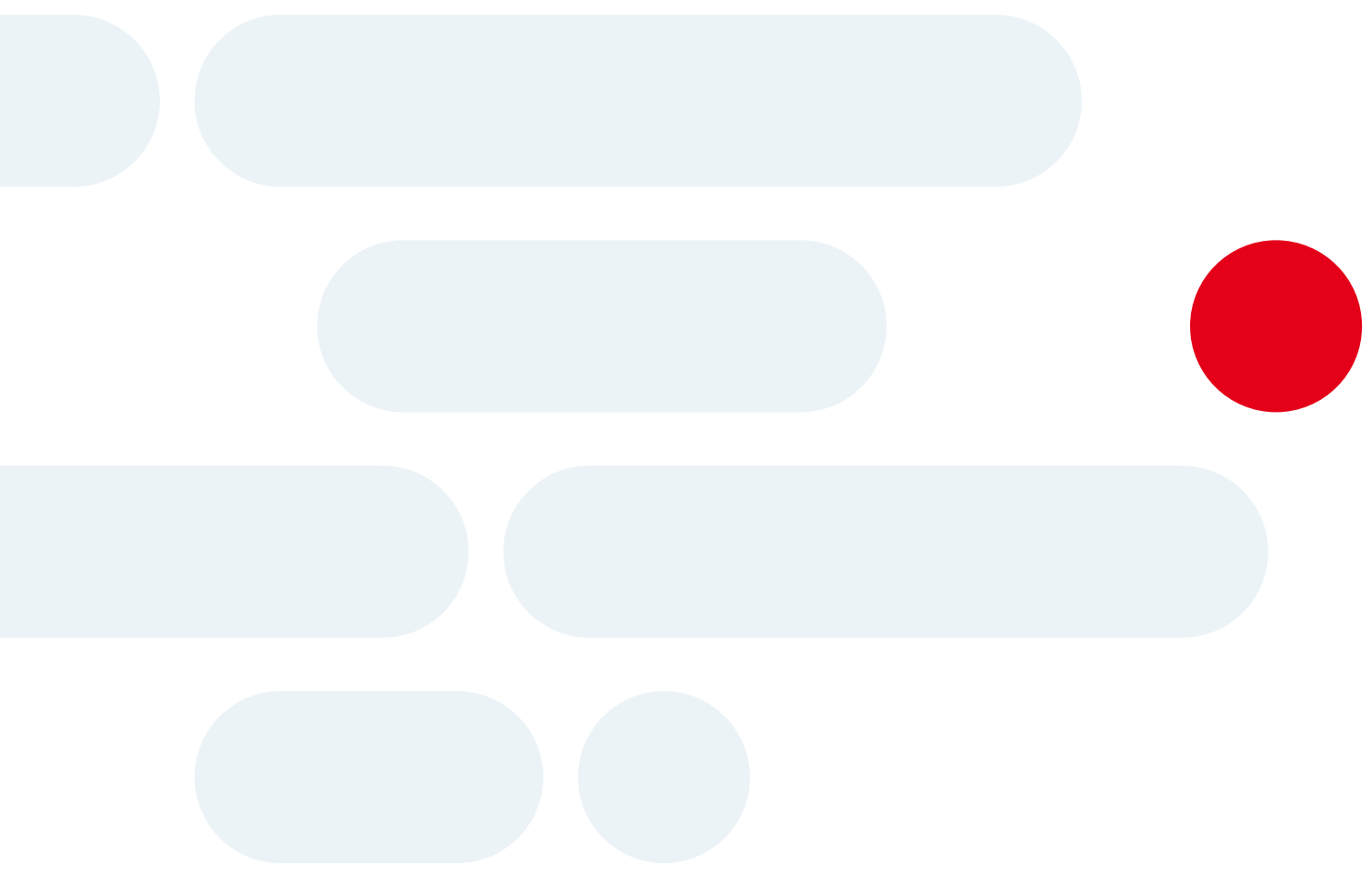


**We digitize ideas into new solutions.
For your success.**

THE JANZ TEC IOT-ECOSYSTEM



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We network hardware, software and processes. For your success.

Industrial solutions since 1982 We are experts for the Industrial Internet of Things. With our expertise from almost 40 years, we design, implement and operate tailor-made IoT solutions for companies from a wide range of industries. As a medium-sized company with our own production facilities, our IoT-Ecosystem offers a holistic approach to networking hardware, software and processes in a value-added manner. Take advantage of the opportunities offered by digitalization in the industrial environment with us. We will implement these profitably for you. Welcome to Industrial Computing Architects.

The success of a company is inseparably linked to its ability to change and to anticipate relevant

trends. Trends such as digitalization, globalization and tertiarization are having an ever increasing impact on companies. Digitalization is only just beginning – a megatrend between opportunity and disruptive potential. The IoT-Ecosystem is our answer to the rapidly increasing new demands of a digitized world. It combines all the important cornerstones of a holistic solution offering for IoT projects. The modular architecture supports our customers both with the requirements of individual components and with complex, holistic tasks. Our customers receive a solution package individually tailored to their business.

Michael Rennerich
CEO, Janz Tec AG

We digitize ideas into new solutions. For your success.

One-stop shop for IoT solutions The digitalization of many processes is progressing steadily. As experts for the Industrial Internet of Things, we support you in the planning, implementation and operation of projects of all sizes. Take advantage of our know-how and make the opportunities of digitalization your success. Janz Tec's experience enables you to realize the networking of hardware, software and processes at the highest security level.

ADDED VALUE THROUGH EXPERTISE

We turn your ideas into digital successes. With real experience.

Benefit from our unique IoT-Ecosystem and individual solutions for more effectiveness, efficiency and transparency in industrial applications.

Reliable Transformation
Experienced project management guarantees the transition to a new solution without production downtimes.

Implementation Competence
IT expertise since 1982 for the secure and reliable networking of your entire system landscape.

Intelligent Security
Highest system security and reliable data protection through our proven security competence.

Extensive Module Concept
Intelligently coordinated IoT modules for your project – developed from one source.

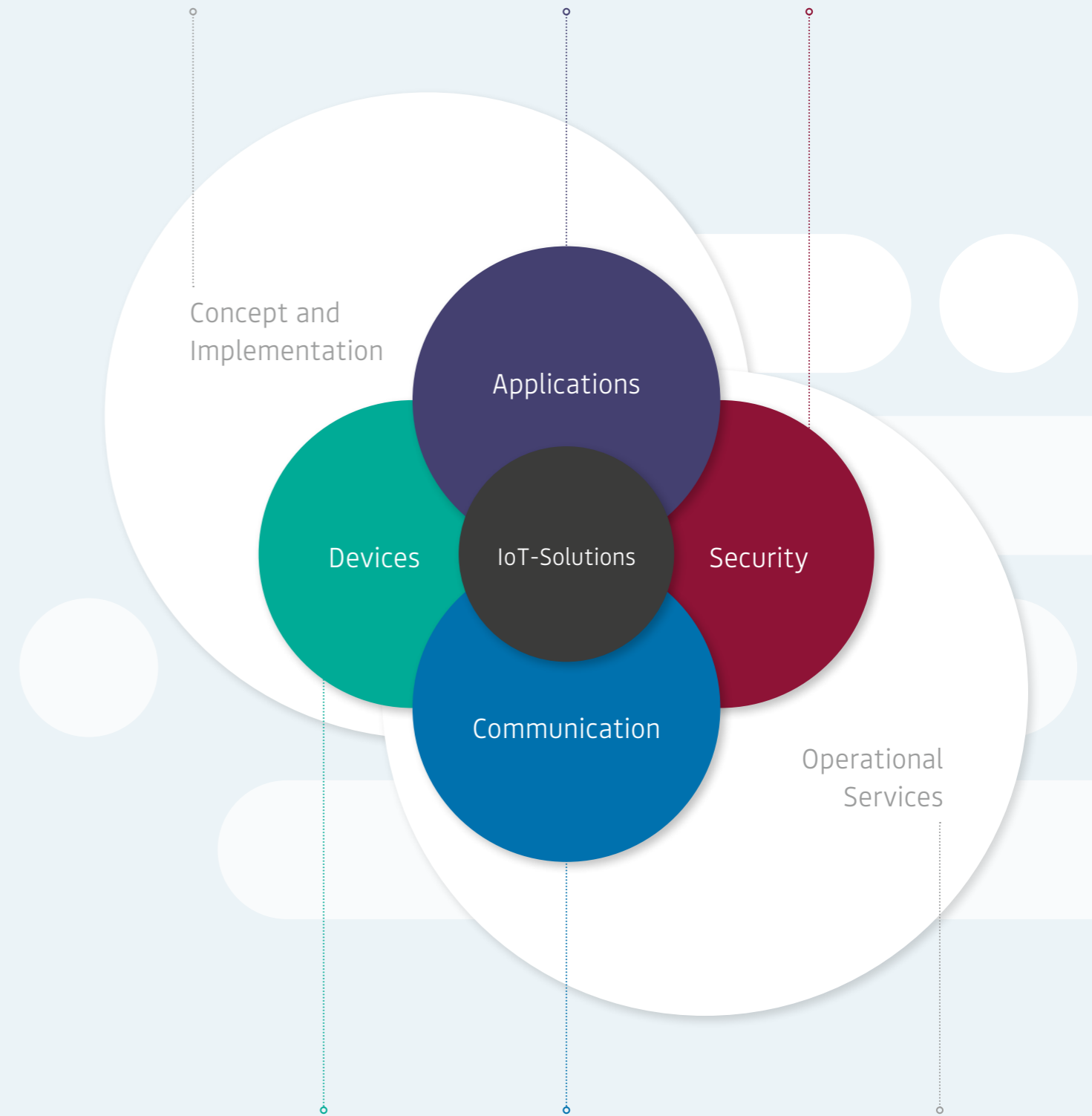
More efficiency
Increase of economic efficiency through individual, modular and scalable IoT solutions.

Made in Germany
Highest hardware quality through own development and production.

In cooperation with you we develop the optimal architecture and implementation planning for your solution. Our IoT experts support you throughout the entire project: from brainstorming to conception and implementation.

We offer software developed for your needs to support your digital processes. Extensive industrial interfaces and connectors to the leading enterprise platforms are available for problem-free integration into your system landscape.

Today, nothing is more important than efficiency and the protection of your know-how and processes. We ensure the highest security in data exchange and data storage. Our proven components are suitable for internal and external use in your industrial networks.



We have been developing customized industrial computer systems and boards since 1982 and our hardware range offers powerful industrial computers for all requirements. If required, we can work with you to develop customized technological solutions that match your requirements perfectly.

We network machines and plants with modern technologies and topologies in the radio network. With mature solution architectures, our Industrial Computing Architects are your experts in the optimal networking and integration of your application for secure wireless Edge Computing.

The reliable operation of your IoT solution is a key success factor. We take over the management of your networked plants and machines. Our Managed Services contribute to ensuring the availability of your systems in a fail-safe manner.



WIRE-BONDING

Flexible control and reliable quality assurance in semiconductor production.

Ultrasonic wire bonding is an essential step in semiconductor production. Here, the integrated circuits are provided with thin wires in order to subsequently connect them to the electrical connections of other components. Automatic machines are used for this process with ultrasound, which have to be particularly precise.



„Ultrasonic wire bonding requires precise control of connections in the smallest of spaces and with sensitive materials. The industrial PCs control these work steps and quality control very precisely and fail-safe.“

Norbert Hein Systems Engineering, Janz Tec AG

Our hardware concepts keep what they promise. Since 1982.

Proven and reliable devices Janz Tec's hardware components have been used in countless sectors and industries since 1982. Our computer systems are characterized by their versatility and are suitable for all industrial applications. In combination with the other offerings of the Janz Tec IoT-Ecosystem, you benefit from customized solutions from a single source.

HARD- AND SOFTWAREENGINEERING

We offer individual solutions. With unique IT engineering.

Our hardware range offers powerful industrial computers for all requirements. If required, we can work with you to develop individual technological solutions that precisely meet your requirements, in an interdisciplinary, competent, networked and independent manner.

Interdisciplinary

The unique combination of specialists from the fields of hardware and software engineering and information technology enables us to design each IoT solution according to the technological application and its specific requirements.

Networked

Our long-standing cooperation with relevant international manufacturers such as Intel, AMD, Advantech, ADATA, Kontron, AAEON, DFI, Axiomtek, Bicker and EKL guarantees high-quality components for all Janz Tec IoT solutions.

Competent

Janz Tec combines competence and expertise in the IT areas of mechanical design, hardware development and software engineering. This enables us to implement even complex projects reliably and quickly with customers and partners.

Independent

Through our own development and production we know each of our implemented solutions down to the smallest detail. This makes us particularly independent and flexible when it comes to adapting or scaling customer requirements.



PARTNER

We offer comprehensive technological competence. With our IoT network.

We work with a network of first-class manufacturers who support Janz Tec in the development and production of innovative components. In this long-term cooperation, all partners speak the same language and realize your projects without detours.



Industrial PCs Janz Tec industrial PCs have been developed in their robustness and reliability for industrial applications in various industries and environments. Our team of experts will be happy to help you with individual requirements at any time.



Industrial Panel PCs Our Panel PC systems are known as emVIEW and emWEB (Web Panels). They all have touch displays with resistive or capacitive technology and are available in different display sizes in 4:3 and 16:9 form factors. All systems are flexibly adaptable and even customizable in the front panel design.



IoT-Gateways The industrial IoT gateway series emIOT serves your special requirements in the industrial environment and enables you to use secure wireless edge computing.



Boards We advise you individually for the tailor-made system in your area of application. We would be happy to take on a system design specially tailored to your requirements! With our own development and assembly in Germany, you can rely on the *Made in Germany* quality feature.



SMART COFFEE

Operational security and sales transparency through networked vending machines.

Vending machines require intensive monitoring. This is especially true for hot drinks, which are freshly prepared. To ensure that all components work reliably, many sensors must communicate with each other. Janz Tec developed a solution that monitors the operating status and ensures high availability guaranteed for fully automatic coffee machines. Networking in real time shows also the current consumption of raw materials and enables precise accounting.



„With our solution, operators can identify technical and logistical problems faster and react immediately. Janz Tec IoT-Gateways network reliably and ensure maximum availability of the devices. And good coffee.“

Alexander Telik *IT systems electronic technician, Janz Tec AG*

We network devices so that they understand each other optimally. For communication on any scale.

Wireless Edge Computing The networking of machines and systems requires reliable and fail-safe data exchange. For this networking, we rely on robust wireless technologies that you can flexibly adapt to your requirements. The basis for this is our certified IoT gateways. Janz Tec offers everything for secure, solid and scalable communication within our IoT-Ecosystem.



JANZ TEC IOT-GATEWAYS

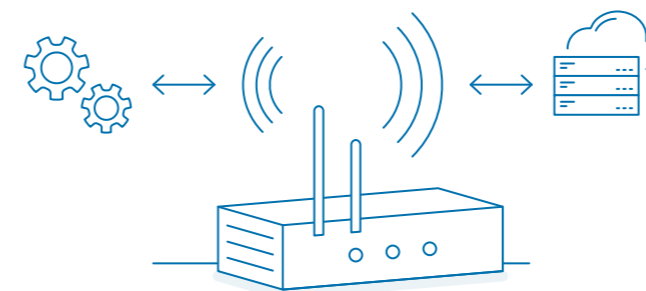
Optimal networking for your requirements. With our solutions.

The intelligent edge computing of our solutions ensures direct data exchange between networked devices. The transfer and processing of data can be accelerated considerably and does not require detours via central data centers. Our devices and the connection to the Janz Tec IoT-Ecosystem enable a highly flexible configuration for your requirements.

WIRELESS-TECHNOLOGIES

We are open to all network technologies. For you to be connected at all times.

With the current wireless technologies, many industrial applications can be implemented in a future-proof way. Together with you, we find the right technological solution and support you in implementing it in your processes.



Wireless and Near-Field technologies

In industrial environments, wireless connections between machines and plants require safe and stable communication. This includes reliable authentication and a user-friendly interface. We offer solutions for all proven standards.

Talk to us about

Wi-Fi, Bluetooth, NFC/RFID, Zigbee

Radio and cellular technologies

For infrastructures that are to be networked across many locations, we offer broadband connections via mobile connections. Mobile radio offers numerous application possibilities, which are used for example for predictive maintenance and monitoring for data exchange in decentralized operation.

Talk to us about

2G, 3G, LTE-4G, LTE-5G

Low Power Wide Area Networks

LPWAN technologies enable wireless operation of devices with low energy consumption and long range. For example, self-sufficient battery-operated modules can be realized with a duration of up to 10 years. Compared to conventional standards, these are more flexible and more cost-effective.

Talk to us about

LTE NB-IoT, LTE CAT-M1, LoRa, Sigfox



Networked e-charging points with clever convenience for customers and operators.

Electric mobility is one of the most important growth markets. The basis for this is a dense network of charging points. We developed a sophisticated networking solution for a provider of state-of-the-art charging points. Robust and versatile, easy to operate and safe to network.



„For the networking of modern charging infrastructures, our components of hardware, software and services such as SIM card management are optimally coordinated. Furthermore, this solution is flexibly scalable.“

Wilhelm Brauer Team Leader Assembly, Janz Tec AG



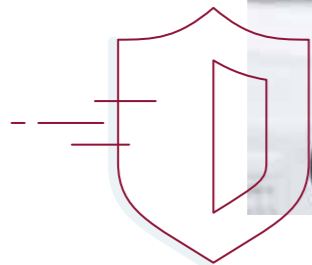
We combine optimal security with solid technology. For your data protection at the highest level.

Protecting know-how and processes The digitalization of industrial processes is associated with many risks. This is indicated by the increasing number of attacks on the infrastructures of plants and machines. That is why the security of data communication is just as important as the protection of your intellectual property. Janz Tec offers individual solutions as part of our IoT-Ecosystem which are based on the highest security standards.

SECURITY SOLUTIONS

Our security concepts provide reliable protection for your data. With the support of the Fraunhofer Institute.

The correct protection of automated processes is an indispensable part of networking. The modular offers in Janz Tec's IoT-Ecosystem take local and supra-regional security solutions into account. They use a highly secure platform developed in cooperation with the Fraunhofer Institute for Engineering Design Mechatronics (IEM).



INDUSTRIAL SECURITY MODULES

Clear advantages with well thought-out modules. For your safety.

Protection against Manipulation

Our security platform automatically detects unauthorized access to the device electronics and other physical manipulation activities.

Remote AAA Infrastructure

Access and its resources are centrally controlled by the Authentication, Authorization and Accounting (AAA) functions. Our platform can also operate offline and automatically synchronizes with the central infrastructure as soon as a connection is available again.

Encrypted communication

All data is transmitted only encrypted according to the current state of technology.

Secure Storage

All data is stored only encrypted. Our security platform thus provides a protected storage location for your sensitive data.

High Assurance Boot

To prevent software manipulation, the devices only run signed and certified software.

Secure Multi-Channel Network Access

Access to local networks or the Internet can be provided via different channels (cable, LTE, UMTS, etc.) depending on your needs.

Position Monitoring

The platform can only be operated at the position defined for it. This ensures additional protection against unauthorized transport, theft and misuse.

Remote Access and Configuration

The security platform can be monitored and configured directly and centrally from the company headquarters, regardless of location.

INDUSTRIAL SECURITY

The modular system for customized security. With top performance for industry 4.0.

Our security platforms have been developed with a holistic concept. The focus was on the optimal coordination of hardware and software. Janz Tec's experience in the design, development and production of these components guarantees a particularly high level of security.

RETROFIT

Make your existing plants future-proof. With our proven security solutions.

Many industrial infrastructures have proven themselves for many years. Future-proof digitalization is possible even for these machines and plants. The IoT-Ecosystem from Janz Tec offers comprehensive possibilities for this purpose, which take comprehensive IT security into account. We call it Retrofit and provide you with custom-made solutions that will secure your investments in the long term and guarantee the protection of your infrastructures in the long term.



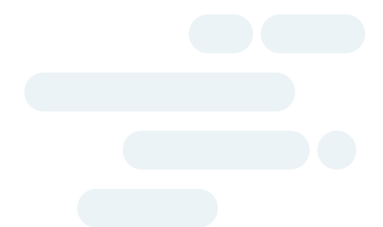
Less paperwork in production with holistic digitalization.

In modern production facilities, the collection of operating data is an important part of production. Current data on conditions and processes are recorded. In the course of digitalization, modern terminals that process incoming data and immediately pass it on to connected systems for production planning, warehouse management or ERP are gaining in importance.



„Our experience in the industrial environment was decisive for the cooperation. With our hardware, the custom-made client software and the detailed consultation, a solution was created which can also be used for other locations.“

Christoph Nienhaus *Key Account Manager, Janz Tec AG*



We develop software that connects everything. For your ideas and for your benefit.

Individual software for individual solutions With our experienced software development, we cover all requirements for a reliable digitalization of your projects. For this purpose, we have the appropriate interfaces and connectors to all leading enterprise platforms. Furthermore, we develop customized solutions that can be optimally integrated into your processes and systems. Janz Tec delivers powerful software in a flexible IoT-Ecosystem that ensures the digital transformation of your industrial processes.



MODULE

Clear advantages through intelligent modules. Software for you.

Data Brokerage

The appropriate software solution connects the shop floor, where machines and plants are networked, with classic IT applications such as ERP, CRM or SCM systems. Our solutions enable simple and flexible data routing and stable communication within business processes.

Device Management

Networked systems have a multitude of different devices. Our management solutions ensure simple and efficient administration of your infrastructures. This includes integration and monitoring as well as continuous updates.

PARTNER-NETWORK

We offer comprehensive software competence. With our IoT network.

We work with a network of first-class software vendors who support Janz Tec in the development and production of innovative applications. In this long-term cooperation, all partners speak the same language and realize your projects without detours.





FEED CONTROL

Animal feeding with mobile power feed plants – precisely dosed and precisely controlled.

The *Th. Buschhoff* company is one of the world's leading suppliers in the field of grain processing. The broad portfolio also includes mobile concentrated feed plants with which individual animal feed recipes are ground and mixed by special trucks directly at the end customer's premises. These processes require exact dosing and precise control of the components on the vehicle.



„The solution was realised in close cooperation with the development specialists at Buschhoff. It shows how we realize customized systems with high flexibility and guarantee long-term availability.“

Tom Karpen Systems Engineering, Janz Tec AG

We network everything. For your benefit.

From vision to implementation

Digital transformation requires holistic thinking. Especially in the industrial environment, projects are often very complex. That is why we support you during the entire conception and planning process as well as during the integration into new or existing systems and processes. Our experienced solution architects at Janz Tec support you in the development and integration of your individual IoT project of any size.

COMPETENCES

We plan and develop your individual IoT solution. With broad experience.

We have many years of expertise in the development of solid hardware and powerful software. This experience forms the basis for the IoT architectures that our experts develop for you. Together with you, we create concepts that can be seamlessly integrated into your infrastructures.

Solution Architecture

Your business models and processes are the basis for planning a powerful IoT concept. We support you in brainstorming, conception and design of the optimal architecture for your project. Our experienced solution architects and partners are at your disposal to assist you throughout the entire process.

Hardware development

We have been developing and producing custom-made computer solutions since 1982 and are one of the leading suppliers in this field. Our strength is the fast implementation of individual requirements for your individual applications. The results are products that are manufactured exclusively in Germany and according to the highest quality standards.

Software development

We use proven resources to develop your optimal IoT solution. In addition to standard applications for reliable operation, we have numerous partners who support our solution architects in implementing customized applications. In this way, the hardware components in Janz Tec's IoT-Ecosystem are provided with optimal support.

System Integration

The essential part of an IoT-Ecosystem is the appropriate implementation of all components. This ensures that the new solution communicates reliably with other systems. We analyse your existing infrastructures and manage the technical implementation for the digitalised networking of your systems and machines.

We manage the operation of your systems. With reliable performance that permanently relieves you.

Managed services from the IoT experts

We offer you comprehensive managed services for the safe operation of your networked machines and plants. We monitor your systems and ensure that the networking of your infrastructures is always up to date. With this in mind, you can concentrate fully on your business. Taking over the operational management is an advantage in Janz Tec's IoT-Ecosystem, which can be scaled optimally according to requirements.

MANAGED SERVICES

We ensure the reliable operation of your infrastructure. With powerful building blocks.

We regularly check your systems for necessary updates. Besides typical updates of operating systems and applications, we also check the current security status. This enables us to quickly identify new security gaps and eliminate them immediately.

UPDATE- AND PATCH MANAGEMENT

Modular services for secure operation.

Monitoring

Monitoring of safety instructions for the hardware and software components used.

Risk analysis

Assessment of security vulnerabilities in terms of the type and extent of the threat. We analyse emerging attack scenarios and examine countermeasures.

Information

Quick notifications of security vulnerabilities identified and evaluated by our specialists.

Roll-out

Updates are rolled out directly to devices and systems. Depending on requirements, the updating of individual device groups is also possible.

OPERATIONAL SERVICES

PUBLIC KEY INFRASTRUCTURE

The key to the security of your data. For protection with certificate.

Data encryption is an important factor when connecting to the Internet of Things. Keys and certificates are required for this. The keys must be kept safe and certificates must be renewed regularly. This is done through a securely hosted Public Key Infrastructure (PKI).

INCIDENT MANAGEMENT

We solve problems faster. So that your lead remains.

If components of your IoT-Ecosystem fail, our experts will be at your side to solve problems quickly and easily. Depending on the service level agreement, you will benefit from continuous availability of your industrial infrastructures. With the right IoT solution from Janz Tec, you will maintain your competitive edge.



REMOTE MONITORING

We control your systems with foresight. So that everything remains secure for the future.

With remote monitoring, we ensure continuous control of all applications in your IoT infrastructure. In addition to real-time data on the status of a device (e.g. temperature, status of an application or software version), other information is continuously checked for secure access. This enables us to detect and eliminate faults for you more quickly.



INDUSTRIAL COMPUTING ARCHITECTS

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