



Press Kit

automatica 2023

Booth 328 | Hall B6

Decentralized installation technology boosts automation efficiency

Murrelektronik is providing an exclusive showcase of its latest automation innovations at automatica 2023 (June 27 to 30 in Munich), where it is exhibiting at **Booth 328 in Hall B6**.

“Follow us into the FUTURE!” is the motto for our live demonstrations showing how you can connect to the future right now – with seamless, decentralized installation technology. We have channeled our installation know-how into the development of hardware and installation concepts, always aiming for maximum openness and performance at all levels and interfaces. Be inspired by our innovative approaches and use Murrelektronik products to take your next, decisive step into the future of automation.

The following highlights await you at automatica 2023:

- **Vario-X – the enabler when it comes to decentralization in production**
Efficient automation solutions call for an end-to-end, decentralized installation concept. Murrelektronik has perfectly embodied this approach with Vario-X, the first ever automation platform that transfers sensor and actuator systems to the field on a cabinet-free, decentralized basis. What’s more, the platform’s digital twin saves time and money during planning, installation, operation and servicing. See Vario-X live in action at the trade show and discover its wide-ranging applications.
- **uKonn-X – seamless electrical installation**
The planning and installation of electrical automation technology offers significant potential for boosting efficiency. Murrelektronik leverages this potential and uses its seamless approach to take the product development process to a whole new level. uKonn-X is the first seamless, digitally and visually supported system with bidirectional communication between the design, development, assembly and commissioning stages. You can try uKonn-X out for yourself at the show under the guidance of experts.

- **Murrelektronik expands operations with machine vision systems**

With its machine vision installation solutions, Murrelektronik now offers customized industrial image processing options for decentralized automation technology. These help to network, digitalize and, ultimately, optimize processes in the material flow and in production. To provide a better idea of potential uses, a machine vision application is also being demonstrated live at the trade show.

- **Emparro20-Pro enables remote access with an IO-Link option**

Emparro20-Pro is over 40 percent slimmer than its predecessor. It is also much smaller and therefore more compact overall. This switched-mode power supply impresses with IP20 protection and a high efficiency level of more than 95 percent, which minimizes operating costs.

- **Intelligent integration of IO-Link devices**

The IP67-rated fieldbus modules MVK Pro and IMPACT67 Pro are the latest additions to Murrelektronik's IO-Link portfolio. With eight multifunctional master ports, these robust modules support all standard protocols or can be used independent of the fieldbus and provide a 4A port output current plus on-board diagnostics.

- **Xelity 10 TX IP67 – a switch designed for heavy traffic and any application**

Murrelektronik's Xelity 10 TX IP67 managed switch offers new possibilities for smart data management on a decentralized, cabinet-free basis. With up to ten gigabit ports, a highly robust design and a whole host of variants, it represents the new benchmark for such products.

- **MQ15 – machine power made easy**

Murrelektronik's water-tight and dust-tight MQ15 plug-in connectors are ideal for connecting asynchronous and three-phase motors. Their tool-free quick-connection system makes them easy to install. A quarter turn is all it takes to lock them securely in place with IP67-rated sealing. The innovative quick-connection system also reduces the assembly time by up to 80 percent when installing new units or carrying out servicing and maintenance work.

Press Release

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Vario-X – the decentralized solution for the automation world of the future

Murrelektronik has long since heard the automation sector's call for efficient, intelligent and simple installation concepts. Vario-X is its answer. This modular platform brings sensor and actuator systems into the immediate machine environment on a decentralized basis and offers a flexible, scalable solution for all applications. When combined with a digital twin, Vario-X takes digitalization to a whole new level. The end result is considerable time and cost savings in installation, planning, operation and servicing.

Welcome to a world where networked production and digital integration are revolutionizing automation. This transformation process is throwing up a whole host of questions for automation experts: How can the benefits of digital technologies such as AI, machine learning, IoT and big data analytics be put to effective use? How can existing systems be linked up to new digital solutions? The challenge lies in building a bridge between the past and future by connecting together analog and digital worlds. Murrelektronik is striving for a seamless, high-performance and futureproof topology.

Vario-X – an impressive concept

A successful digital transformation needs consistent decentralization. The concept at the heart of this decentralization is as simple as it is brilliant. The first step is to pack the power supply along with peripheral components such as fuses and the main power switch into small, decentralized modules. The next step is to place these compact units directly alongside the production machine, along with the industrial PCs that take care of communication and control elements for the entire system or for individual modular machine components.

The award-winning Vario-X automation platform is the perfect embodiment of this approach. It is the enabler for decentralization in industry and production. For the first time, all automation functions can be scaled as required and implemented on a decentralized basis, i.e. without a conventional control cabinet architecture. Besides being a platform, Vario-X is also an installation concept that can be adapted to suit specific purposes and customer requirements. After all, when it comes to creating an

efficient installation solution, the basic idea of “simplifying, modularizing, transferring to the field and combining technologies” is all-important – and provides the basis for building decentralized automation concepts.

“Vario-X offers 100 percent decentralized, cabinet-free automation,” says Olaf Prein, Head of Global Business Unit Automation at Murrelektronik. “Our automation platform delivers modular and transparent processes, higher added value in all areas of your company and, consequently, improved competitiveness and profitability in mechanical and plant engineering. Thanks to the integrated installation concept alone, Vario-X reduces the amount of time it takes to install a machine by around 40 percent.”

Leading the way in this regard is a newly developed installation concept from Murrelektronik for decentralized servo drive technology. One crucial component is the MQ15 DC plug-in connector, which features an innovative quick-connection system. A quarter turn is all it takes to connect up the machine system. This means that, when using pre-assembled cables, connections can be made easily, securely and – most importantly – without any errors. That saves time and thus reduces installation and planning costs.

High-performance, robust, simple

While seamlessly integrating decentralized servo drives, Vario-X ensures reliable voltage, signal and data management in the immediate machine environment. At the heart of this innovative platform are robust water- and dust-tight enclosures with IP65 protection that house the power supply, control system, switches, safety technology and IO modules. These can be easily snapped into a no less robust backplane with integrated machine construction profiles. Equipped with a multicore CPU, the Vario-X controller can meet all requirements and be easily integrated into all higher-level Industrial Ethernet networks as an open control platform. The 48 V system also offers enough power to cover virtually all areas of application.

From sensor to cloud

Vario-X is more than just a collection of backplanes, control modules, cables and so on. A machine system that is automated with Vario-X can also be accompanied by a digital twin. This versatile 1:1 virtual representation contains all the functions and parameters of the future, real-life system – and can be created as early as the project phase, before the first mechanical component has even been ordered or fitted. To do that, Murrelektronik takes the engineering files for machines and systems and

creates a kinematic model using special software that can then simulate subsequent movements and sequences. As a result, innovative applications can be implemented with ease, such as visualizing and controlling the digital system via augmented reality (AR) using a smartphone or tablet. The digital twin can also monitor the machine system as it operates and can read out machine data.

An efficiency booster for production

Ever-growing demands relating to energy efficiency in production and manufacturing can also be supported on a dynamic basis. Take pneumatics, for example, a technology that is very widely used, but can have an efficiency rating of just 10 to 20 percent if it wastes a lot of energy due to countless system air leaks and inefficient actuators. Vario-X offers a really simple means of electrifying system components that have previously been operated pneumatically. In fact, replacing pneumatics with electrics – for instance on clamping units in bodywork production – brings nothing but advantages all round. Business owners can reduce the amount of inefficient, difficult-to-control and relatively expensive pneumatics in their workshops, production planners can focus on a single energy source (electricity), staff can finally work in noticeably quieter conditions and, of course, the environment benefits, too.



Caption: Vario-X is a modular and highly flexible automation platform that can be used to implement all automation functions on an entirely decentralized basis for the first time.

Image: Murrelektronik GmbH



Caption: *Power clamps operated by Vario-X are more dependable and less error-prone in operation than conventional pneumatic systems. The platform can provide information about parameters such as position, torque and speed at all times.*

Image: *Murrelektronik GmbH*

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Seamless Electrical Installation

uKonn-X provides seamless, smooth, digital and visual support with bidirectional communication along the product creation process.

There is significant potential for increased efficiency in the planning and installation of electrical automation technology. Murrelektronik leverages this potential and takes the entire product development process to a new level with its seamless-approach. uKonn-X is the first seamless, digitally and visually supported system with bidirectional communication between design, development, assembly and commissioning. It avoids installation errors and at the same time leverages impressive savings potentials. "Time savings of up to 70 percent can be achieved with our new digital solution during installation and commissioning alone. Our system also significantly shortens troubleshooting. We talk about "seamless installation" in this context," says Dr. Paul Zeller, member of the Murrelektronik Executive Board.

uKonn-X is a system that, as a digital solution, addresses all interfaces with products within electrical automation technology. The goal is the smooth and effortless connection of all participants - human and product - along the entire product creation process. The system is based on the digitization of existing physical components and communication processes. In the first expansion stage, uKonn-X works as follows: The commissioning engineer or installer of a machine uses a mobile scanner to interpret a machine-readable code printed on the connectors from Murrelektronik. The digital solution shows the imported circuit diagram as well as the 3D model on a touch display to visualize which components must be connected to each other: LEDs light up on the corresponding fieldbus modules in the machine to indicate the assigned port. Once an installation step has been carried out, the installer confirms the correct connection on the display, thereby simultaneously triggering the automatic documentation. In a nutshell, this means: take the component or connector, scan it, identify the port thanks to the illuminated diode, attach or plug it in, confirm and trigger documentation. If changes to the installation are necessary, the installer or commissioning engineer can conveniently communicate these digitally to the design department via an integrated function. Starting from the installation, this supports development and improves the design of the machine while ensuring accurate documentation. The steps of the entire product development process are thus seamlessly and smoothly connected - Seamless

Electrical Installation.

uKonn-X interprets the circuit diagrams and creates the Bill of Material (BOM). Murrelektronik assembles individual connectors and provides them with a machine-readable marking. In addition, Murrelektronik delivers the connectors sorted according to their positioning within the machine, if requested by the customer.

Murrelektronik thus solves several problems in the electrical installation of machines with one stroke, since this is still a complex, sometimes time-consuming, tedious and error-prone task: To this day, electrical circuit diagrams, often several hundred pages long, have to be read, understood and correctly transferred to a cabling system. Sensors, actuators, switches, power supplies and much more must be interconnected. As a result, it is not uncommon for troubleshooting and correction to take up more time than the actual installation and documentation. uKonn-X shortens this time, which pays off in hard cash because installation and commissioning times are reduced, and the system goes into operation more quickly. In addition, uKonn-X simplifies the process to such an extent that it counteracts the growing shortage of qualified professionals.

Dr. Paul Zeller: "Murrelektronik is a proven specialist in seamless, decentralized electrical installation technology. We have now transferred this into the digital world and also made it intuitive for the user with the help of visual support to ensure a new level of quality. In short, with uKonn-X, Murrelektronik has made electrical installation simply seamless."



Caption (Scan): With uKonn-X, the installer uses a mobile scanner to interpret a machine-readable code printed on Murrelektronik's connectors.

Image: Murrelektronik GmbH



Caption (Plug): uKonn-X uses the digitized circuit diagram on a touch display to visualise which components the scanned connectors link with each other - on the corresponding fieldbus modules of the machine, LEDs indicate the assigned port.

Image: Murrelektronik GmbH



Caption (Confirm): Once the installer has plugged in the connector correctly, he confirms the correct connection on the display with uKonn-X, triggering automatic documentation at the same time - if changes to the installation are necessary, the installer or commissioning engineer can conveniently communicate these digitally to the design department using the integrated function.

Image: Murrelektronik GmbH

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Murrelektronik simplifies industrial image processing

With its installation concept, the German specialist for decentralized automation technology offers solutions for the quick and efficient creation of a machine vision infrastructure.

Keeping an eye on process chains is a daily challenge in industrial production and modern-day logistics. Demand for industrial image processing and machine vision systems is therefore growing. These systems help to network, digitalize and, ultimately, optimize processes in the material flow and in production. They call for efficient end-to-end signal and data management between the control system and the relevant machinery and equipment.

Plug & play for machine vision systems

Murrelektronik has the perfect solution – an installation concept based on the plug & play principle. The company's decentralized assemblies are pluggable and mountable in the immediate machine environment. They include switches, distributors, power supplies and the associated high-performance, pre-assembled cable and connector technology. This has the advantage of minimizing the amount of installation work required and maximizing the performance of both new and existing machines and systems.

An installation concept aims to combine the sensor and actuator technology efficiently and cost-effectively in a single system, also ensuring reliable data communication and a dependable power supply. The machine vision installation solutions from Murrelektronik benefit from a modular design and can also be incorporated into an existing system architecture. The concept centers around the Xelity Hybrid Switch, which handles the data communication and power supply requirements of up to four cameras. In combination with three switches and L-coded M12 plug-in connectors, the machine vision application is quick and easy to set up for as many as twelve cameras. IP67 protection offers maximum flexibility – the system can be retrofitted without disassembling the unit and can be used immediately. If the equipment needs to be transported, it can be moved module by module thanks to defined mating points.

Saving time and improving safety

All components are fitted using pre-assembled plug-in connectors in the immediate machine environment. All the sensor and actuator systems are also connected in this way. “That significantly reduces the installation time,” says Simon Knapp, Solution Manager Machine Vision Systems at Murrelektronik. Quick and easy installation frees up valuable capacity. “Even planning an upgrade or expansion – from procurement to commissioning – is extremely time-consuming,” explains Knapp. Another advantage is that Murrelektronik modules and switches supply diagnostic data in addition to process data. Anomalies can thus be detected at an early stage, which increases machine availability and reduces costly downtime.

“Ultimately, though, it’s not a specific product that is decisive when it comes to creating an efficient machine vision infrastructure, but rather the fundamental idea on which decentralized automation concepts are based – simplifying, modularizing, transferring to the field and combining technologies,” continues Knapp. At Murrelektronik, a data transmission rate of 1 gigabit/second (Gbit/s) via X-coded data cables leading to the switch makes for problem-free high-resolution image processing. Network communication takes place at up to 2.5 Gbit/s.

Easily scalable and extremely flexible

Murrelektronik’s decentralized, modular installation concept is easily scalable and extremely flexible. It also relieves the pressure on control cabinets. In many scenarios, efficient industrial image processing is only possible in the first place as a result of these benefits. As Knapp sums up: “Whenever companies are looking for ways of optimizing their processes, cutting their operating costs and boosting their overall performance, our machine vision installation concept offers concrete solutions.”



Caption: Machine vision installation solutions from Murrelektronik – Xelity switches, including NEC Class 2 power supply, ensure smooth, error-free data communication.
Image: Murrelektronik GmbH

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Flexible, efficient, reliable - Emparro20-Pro

Murrelektronik will be presenting Emparro20-Pro – an IP20 rated switch mode power supply with an IO-Link option.

The Emparro20-Pro switch-mode power supply, developed in-house by Murrelektronik, can be equipped with an IO-Link adapter, sold separately to allow users remote access to perform tasks like setting the output voltage, locking the controls to prevent unauthorized adjustment of the output voltage, and running diagnostics.

With dimensions of 50 x 123 x 138 mm, Emparro20-Pro is more than 40% narrower and, overall, significantly smaller and more space-saving than its predecessor. The switch-mode power supply can either be DIN rail or screw mounted. The tool free DIN rail mounting option simplifies installation at the customer's site saving both time and effort.

Several devices can be operated via the parallel mode. Potentiometers are a thing of the past with Emparro20-Pro as voltage is now set using keys. The 22 - 28V DC output voltage can be adjusted using the + and - keys. The keys can be locked via IO-Link or a key combination on the device preventing unwanted output voltage adjustment.

Emparro20-Pro has a $\geq 95\%$ efficiency rating which offers a range of savings opportunities. Operating costs are kept to a minimum. Plus, the control cabinet stays cooler meaning that control cabinet air conditioning can be reduced in some cases. The service life is increased, and reliability is enhanced. Finally, thanks to overvoltage category III, Emparro20-Pro is insensitive to overvoltages.

Users can always keep an eye on the Emparro20-Pro's lifecycle via preventive diagnostics. This function indicates when the switch-mode power supply is approaching the end of its product life cycle by tracking various parameters including the power supply's internal temperature, switch-on processes and a permanent overload of more than 120%. When the statistically calculated service life is reached, this is signaled via a potential-free contact. The power supply will continue to function normally at this point, but the failure risk increases therefore maintenance should be made aware of the state. This way downtimes can be avoided and machine availability and productivity can be increased.

With the Power Boost function, Emparro20-Pro supplies 150 % power (30 A for the 20 A power supply) for five seconds. If the power supply is utilized to more than 90%, this is signaled by the flashing "OK/ALARM" LED.

With the Standard and Advanced models, Murrelektronik will offer additional products in the Emparro20 family in the future allowing customers to select the right power supply for their application.

Murrelektronik is one of the few manufacturers to comply with the EN-61204-3 standard, thus offering customers a high-quality product. Emparro20-Pro is currently scheduled for release in the fourth quarter of 2022.



Caption: The Emparro20-Pro switched-mode power supply from Murrelektronik has an efficiency of more than 95% and can be equipped with an optional IO-Link adapter.

Image: Murrelektronik GmbH

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Multitalented Masters

Murrelektronik expands its IO-Link portfolio with the IP67 rated MVK Pro and IMPACT67 Pro fieldbus modules. The robust modules provide on-board diagnostics and 4A per port output current. They are available in all common protocols and can be used independent of the fieldbus.

IO-Link stands for “plug-and-play” installation in automation technology. Against a backdrop of increasingly complex production processes and plants, in which more and more data is being collected and networked, the communication standard creates maximum transparency from the sensor-actuator level all the way to the cloud. Murrelektronik has expanded its IO-Link portfolio with the IP67 rated MVK Pro and IMPACT67 Pro fieldbus modules. The new modules have eight multifunctional class A/B master ports, two L-coded M12 ports for supplying up to 16A of power, and are available for PROFINET, Ethernet/IP and EtherCAT. Fieldbus independent use is possible through OPC UA, MQTT, JSON REST API – thanks to the integrated Standardized Master Interface (SMI). All in all, these devices lower costs and increase productivity while offering new options for service and maintenance. Installation and start up times are shortened because these modules can replace complexly wired, space-consuming control cabinets.

In addition to pure process data (I/Os), the new MVK Pro and IMPACT67 Pro modules also provide additional diagnostic data (voltage, current and temperature) for each port as well as for the entire module. This enables operators to detect anomalies and optimize their processes using data analytics. Thanks to the IIOT protocols, this is standardized and does not require a controller.

The integrated A/B ports are real workhorses. The function (IO-Link, DI, DO, DIO or a combination) can be configured at each pin. Automatic supply voltage switching means that the correct voltage supply, actuator supply for DOs and sensor supply for DIs, is always used. Devices with higher energy demand are also powered directly from the module. The 4A rating on each port, eliminates the need for an external power source or such devices. The L-coded M12 ports allow for daisy-chaining and provide up to 2 x 16A power which simplifies installation and reduces cable runs. Your choice of a plastic or metal housing, each with an IP67 rating, make these robust master modules.

The MVK Pro and IMPACT67 Pro fieldbus modules round out Murrelektronik's broad IO-Link portfolio that includes masters, hubs, converters, devices and connection technology. As a system provider Murrelektronik offers everything necessary to network the controller with the sensor/actuator level using IO-Link. Everything is designed to work together, is optimized for the application, and comes from a single source.



Caption: *The IP67 rated MVK Pro and Impact67 Pro fieldbus modules expand Murrelektronik's IO-Link portfolio. They are available for all common protocols or fieldbus independent use and provide 4A port output current, on-board diagnostics and robust housings.*

Image: *Murrelektronik GmbH*

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Xelity 10 TX IP67: A switch for every application

The Xelity 10 TX IP67 managed switch from Murrelektronik offers new possibilities for decentralized, cabinet free, data management. With up to ten Gigabit ports in a robust housing, it represents a new standard in switches.

With the new Xelity 10 TX IP67, Murrelektronik offers a line of robust, space-saving switches designed for the heavy traffic that comes with today's installations. The ten port switches are available in three models: 10 x 100 Mbit/s, 10 x 1000 Mbit/s, and 2 x 1000 Mbit/s + 8 x 100 Mbit/s. Each model can also be ordered specifically for a ProfiNet system.

Developed in-house, Xelity 10 TX IP67 is Murrelektronik's response to the desire on the part of machine builders to replace classic control cabinet solutions with IP67 components in the field. The growing trend of decentralized wiring offers advantages that include significant space savings in the control cabinet as well as shorter cable runs.

Its L-coded M12 power connectors (4 or 5-pin) ensure fast connections as well as the ability to daisy chain several devices as long as the combined power usage does not exceed 16A. Each model uses the same drilling pattern and power connector connection. There are no specifications for grounding thanks to the free grounding concept. The Xelity 10 TX IP67 can also be combined with Murrelektronik's other M12 power modules to create a single source power concept.

The IP67 rated metal housing allows the switch to be used in harsh industrial environments. Faster and simpler fault detection, full topology flexibility as well as fast scaling and easy commissioning round off the features of this impressive switch.

The range of models and simple installation and configuration make the Xelity 10 TX IP67 extremely versatile. The switch is ideal for machine builders, plant engineers and component manufacturers alike.

Thanks to its various expansion levels, users can easily adapt the Xelity 10 TX IP67 to specific applications. Numerous configuration adjustments, such as port mirroring or

port granular shutdown, can be made via the integrated web server. Configurations can also be saved for recurring installations or in the event device replacement is required. High flow rates shorten the clock rates in applications.



Image: Xelity 10 TX IP67 Managed Switch

Photo: Murrelektronik GmbH



Caption: Xelity 10 TX IP67 Managed Switch (Applikation)

Image: Murrelektronik GmbH

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Machine Power Connectors

Murrelektronik's waterproof and dustproof MQ15 connectors are ideal for connecting asynchronous and three-phase motors.

Machines, and systems, need power. Reliable, easy to install and safe to operate. Simple solutions for supplying power to machines and systems are in demand. MQ15 connectors from Murrelektronik meet this requirement. The connectors are easy to install thanks to the tool-free quick connection. A ¼-turn is all that is needed for an IP67 rated connection. The innovative quick connect system reduces assembly time for new installations, service, and maintenance by up to 80 percent. Safe assembly is enhanced by the fact that the connector's locking status is marked both visually and haptically. Additionally, an audible "Click" provides acoustic feedback that the MQ15 has been properly installed. The PUR overmold ensures tamper resistance as well as protection against bending and vibration. Additional protection is provided by a locking mechanism and a conduit retainer on the connector.

Broad portfolio for high continuous load

The MQ15 family includes single or double-ended overmolded, pre-assembled connectors with your choice of highly resistant PUR or cost-effective PVC cable as well as receptacles and T-couplers. They are available in 4 and 6-pole versions with wire cross-sections of 1.5mm² and 2.5mm² respectively. The product portfolio is rounded off by the h-distributor with molded cables, which allows power distribution to be flexibly routed at any stubs reducing the number of mating points.

The MQ15 transmits high currents in the smallest space with the best price/performance ratio on the market thanks to the use of high-conductivity plastics and the elimination of metal parts. The 4-pole version has three power contacts + PE, while the 6-pole version offers two signal contacts. The latter makes it easy integrating additional functions like temperature or brake. The current transfer values of up to 16A continuous load at a voltage of 600V AC opens up a wide range of applications. With the MQ15 receptacles, motors can be converted to a pluggable solution in no time at all. This saves time and manpower during both installation and maintenance. The receptacle is simply screwed into an existing M20x1.5 threaded hole in the motor housing - no adapters or special solutions required.

With an IP67 rating when mated, the MQ15 series is also suitable for harsh industrial environments. They are 100% electrically tested and ensure a simple, error-free, plug

and play solution. All models have a single piece MOQ, regardless of design or length. This CE compliant product is also UL listed, so it is ready for worldwide use.



Caption: Murrelektronik's MQ15 water- and dust-tight connectors supply power to machines and systems and are ideal for connecting asynchronous and three-phase motors.

Image: *Murrelektronik GmbH*

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FOUNDATION

Founded by Franz Hafner in 1975.

PRESIDENT

Dr. Ulrich Viethen

EMPLOYEES

3.100 employees

MURRELEKTRONIK AROUND THE WORLD

Five production plants – in Germany (Oppenweiler and Stollberg), the Czech Republic (Stod), China (Shanghai), and the USA (Atlanta). Murrelektronik is represented by offices and partners in more than 50 countries.

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INDUSTRIES

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PORTFOLIO

- Murrelektronik's solutions feature tailored power supply and monitoring systems for entire plants as well as for connecting actuators and sensors with a proprietary or any other control system – all the way up to the cloud.
- With its technologies for network installations, I/O systems for all fieldbus and IoT protocols, safety technology, and efficient power supply solutions, Murrelektronik assists its customers with their digital transformation and the realization of new business models in the age of Industry 4.0.
- Murrelektronik focuses on decentralization to relocate assemblies from the control cabinet to directly in the vicinity of the process. This conserves resources and saves a great deal of time needed for installation and activation. The modular automation system Vario-X encapsulates this approach.
- Decentralized modules can be paired with preassembled connectors – this is significantly quicker and results in flawless, secure, and reliable connections. The use of smart decentralized modules makes simplified service and maintenance processes possible. This reduces downtimes and leads to maximum productivity and high quality.
- Murrelektronik is a market leader in connection technology and offers a wide array of cable lengths, cable types, and jacket colors.
- Customers benefit from application advice, services such as customer-specific developments or packaging optimization, and technical and commercial customer service.

WHAT WE ASPIRE TO

Murrelektronik products

- ... boost competitiveness
- ... save time on installation and activation
- ... conserve resources
- ... improve profitability